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AMERICAN COLLEGE AND UNIVERSITY SERIES

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THE UNIVERSITY AT NIGHT

COLUMBIA

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INTRODUCTORY

> "Where should the scholar live? In solitude, or in society, in the green stillness of the country, where he can hear the heart of Nature beat, or in the dark gray town, where he can hear and feel the throbbing heart of man? I make answer for him, and say, in the dark gray town."—LONGFELLOW.

COLUMBIA UNIVERSITY is but one of many homes for the city scholar. In the United States alone there are eight hundred degree-granting institutions, most of them in or near the cities. A good number of them have been dubbed universities for no better reason than the impressive sound of the word, until in some sections universities are no rarer than colonels. The abuse of the name, however, must not blind us to the significance in our life of the real university, which, as the medieval cathedral stood six hundred years ago, stands to-day as the best embodiment of the uplifting forces of the human spirit. In 1893 Professor von Holst declared that we did not have a single university in the sense in which the term is used in Europe. To-day there are on the North American continent a score. No one of them is the great American university. Each leads the others in one field or another. It is, indeed, to the general interest that each should maintain a character true to its historic relations and just to the work it finds to do.

In the pages that follow I have endeavored to emphasize the matters in which Columbia differs for better or for worse from other institutions, and have omitted, or treated as briefly as possible, those which are characteristic of our universities in general.

Columbia suffers to-day from one too obvious characteristic, the immense number of students. During the past twenty-five years, the aggregate growth of the student body in the most important American universities has been almost uniform; in other words, the " curve " has been a straight line. But Columbia has grown more rapidly than any of her sisters, and, taking into consideration her enormous size and her real youth as a university, it is not strange that in many cases too much is expected of her, as it often is of an overgrown child. It need hardly be said that Columbia is herself painfully aware of her deficiencies; indeed, since the first stirrings of university life, some fifty-odd years ago, she has been rather conspicuously insufficient unto herself.

At present she has also the largest financial resources among American universities. This predominance, like that in numbers, may well be only temporary, in view of the already magnificent and rapidly increasing annual appropriations to the State and Provincial universities, to say nothing of the immense potential value of the lands which some of them own. Twenty-five years ago Columbia was popularly supposed to have more money than she knew what to do with, but President Low and President Butler have, I think, effectually disabused the public mind on this point. Columbia's wealth is significant, indeed, not so much in its amount as in its origin. The ordinary sources of university wealth have hardly been touched. Nothing has come from the national government, through the Morrill Grant or otherwise. For nearly a century nothing has been received from the State of New York, and for a century and a half nothing from any religious body. Of the two great national patron saints of learning to-day, St. Andrew has not yet identified himself with Columbia, and the direct gifts of St. John, although useful and welcome, bear but a small proportion either to his general largess or to the resources of the institution. The alumni body of the undergraduate schools is relatively small and, in spite of a few instances of striking generosity, the gifts of alumni as a whole make but a relatively small total.

Columbia is what she is because she is Columbia University *in the City of New York.* Her growth has been a function of the growth of the city, and it is to the city that she owes and is trying to pay her chief debt. It is important to emphasize this just now, because her increasing hold upon the country at large is obscuring her fundamental relation to the city.

It was a little group of New Yorkers who founded King's College in 1754, when Manhattan Island had fewer inhabitants than the University now has students and but thirteen of them held academic degrees. Then as now, however, the population was extraordinarily diverse in make-up—a diversity that has been reflected from the first both in the cosmopolitanism of the faculty and in the various elements in the student body. In a time of bitter religious controversy, these men drew a charter which, when we remember that Harvard and Yale were then hardly more than sectarian divinity schools, was extraordinarily liberal. It was a day of narrow intellectual outlook; Oxford and Cambridge were at a low ebb, the British Museum was but a year old, and " Johnson's Dictionary " had not yet been published. The first announcement of King's College, nevertheless, showed a breadth of scope and a confidence in the future that were remarkable. If, however, intellectual life was unprogressive, it was on the other hand a time of keen political ferment. It was in 1754 that the Colonial Congress met at Albany to discuss Colonial Union. The little college soon caught the spirit of the day, and I think I am right in saying that the alumni and students of no institution took a more prominent part proportionally to their numbers in the American Revolution, and in the founding of the Republic. The institution that trained Hamilton and Livingston and Jay justified its existence to New York, and to the nation at large; and, although the nation paid but little heed to her for a century or more, the fortunes of the College and of the City were from then on bound closely together.

When peace was restored, the first student to enter the College, now Columbia—the word had been coined and popularized in a Revolutionary war song—was De-Witt Clinton, and it was he who, with three other alumni—Morris, Stevens, and Tompkins—made the growth of New York possible by strengthening her strategic position through the construction of canal and railroad.

For nearly a century the city did little in return, and the financial struggles of the College, while less picturesque than those of the State universities, were no less bitter and were made the harder by the necessity for the genteel keeping-up of urban appearances. Finally, however, the increase in population gave value to two tracts of land, one of which had been given by Trinity Church, with a small addition from the city, and the other by the State Legislature. Without the rents from these tracts the later development into a university would have been impossible. It was not until the end of the nineteenth century that any considerable addition was made to the endowment from private sources. The magnificent gifts of recent years have in the great majority of cases been made by New Yorkers who wished in some appropriate way to express their obligation to the city. No better example can be given than the bequest of John Stewart Kennedy in equal parts to the University, the Public Library, the Museum of Art, and the Presbyterian Hospital.

From the first Columbia, if poor in funds, has been wealthy in the men who have served her. Of those no longer living, four at least had in large degree the prophet's vision: Samuel Johnson, Hamilton Fish, Samuel Ruggles, and Frederick A. P. Barnard. It is noteworthy that all were trustees; for the loyalty, courage, and foresight of her trustees have been from the beginning until the present day a notable and vital characteristic. She has had also from the first her great teachers and her great scholars; without these no university can come into being. In the words of President Butler's inaugural: "The thirst of man for the truth, his imperious ambition to know what lies behind the screen that veils new knowledge from his eyes, his anxious haste to touch the hem of the garment of a great personality, a great scholar, a seer, a prophet of literature or of science—these are the feelings stirring in the hearts and minds of men that have brought them into membership with universities and that have given universities to the world."

About the original College a number of schools have clustered, partly by outgrowth from within, partly by annexation, and partly by treaties of federation. Columbia's organization has been likened to the British constitution, on the ground that it ought not to work but it does. She has been called a complex congeries of provinces, allies, crown colonies, protectorates, residencies, and native states. Her treatment of certain problems arising from her characteristic development may have its lesson for those outside her walls, notably her achievement of essential educational unity in spite of diverse financial control and initiative, her attempts to solve the problem of an unprecedentedly rapid and diversified growth by the gradual but rigorous raising of standards, and by close attention to what is called in business "functional administration." Not alone by formal arrangements for exchange of professors, and by world-wide distribution of students, but even more by the countless intangible effects of the freemasonry of scholarship, the institution to-day holds a place of national and international importance among universities.

Columbia's academic peace has not been unbroken, but even her troubles have their usefulness if their lessons can be read aright. At the very outset there were violent protests at the prominent part taken by Trinity Church. There was another heated period in 1811 upon the appointment of a Presbyterian executive. This was the year of a riot at Commencement that affected New York politics for long afterward. There was further excitement at the time of the founding of New York University in 1830. Twenty-four years later a bitter controversy regarding a professorial appointment prevented the celebration of the centennial of the founding of the College and led to an investigation by the State Senate. In 1891 the reorganization of the School of Law against the desire of the venerable and renowned Professor Dwight precipitated another controversy. The abolition of intercollegiate football in 1905 upon the ground that, for Columbia at any rate, the game had become an academic nuisance, was the occasion of vigorous protest. Within recent years the University has received much criticism with respect to the departure of certain prominent professors. Some cases were clearly " academic suicides," others were caused by honest differences of opinion, by misunderstandings, or by inevitable clashes of temperament. Like most of the world's troubles, some might have been averted if foresight were as clear as hindsight, and all of them were aggravated by the high pressure of city life, and by a city press eager for " stories " and not too scrupulous as to where they are obtained or how they are embroidered. The difference between the real facts and the published reports has sometimes been absurd. Any university must expect criticism, deserved and undeserved, but the serious public is fortunately learning to build its judgments not upon incidental difficulties, but upon general service to the community.

In writing this book it has not been easy to make a satisfactory selection of those details which, to quote a character in " The Mikado," are needed to embellish and adorn an otherwise bald and uninteresting narrative. Since the University came into conscious being, about twenty years ago, so much has come into print that one meets truly the embarrassment of wealth. In particular, Professor Van Amringe and Mr. Pine of the Board of Trustees deserve all praise for their preservation of historical traditions and their laborious collection of material, as does also Professor Munroe Smith for his invaluable use of this material in describing the actual organizing of the University. I am indebted mainly to the " History of Columbia University," published upon the 150th anniversary of the founding of King's College, to the annual reports of Presidents Barnard, Low, and Butler with their appendices, to the *Columbia University Quarterly*, the *Alumni News*, the various student publications, and the *Columbia Hand-*

book, recently published by the University Press. It will be seen also that much has been borrowed from Dr. Slosson's suggestive and stimulating comments in "Great American Universities." Since my book makes no pretensions to original historical scholarship, I have ventured to avoid quotation marks and footnotes by a prefatory general confession that in many places "what I thought I might require I went and took."

It has been my effort throughout to select and arrange the material with a view to emphasizing what seems to me to be the fundamentally important thing—the essential unity of the University in organization and in spirit, rather than to try to give a detailed picture of its diverse component elements.

I

THE BACKGROUND

The Real Birthday. Strivings Before 1852. Financial and Other Factors. The Old College. Inquiry by Trustees' Committee. Statutes of 1858. Law and Mines. President Barnard. His Work and its Importance. The Reports. College Studies and Discipline. Advanced Work. Professional Courses. Training of Teachers. Admission of Women. Barnard's Personality and Memory.

Columbia may be said to have had not one birthday, but three: a first in 1754, when Samuel Verplanck enrolled himself as a member of King's College; a second when DeWitt Clinton in 1787 was examined for admission to the revived institution, newly christened Columbia College; and a third when a body of respectable middle-aged New York gentlemen adopted what is known as the Report of 1857. The centennial of the second birthday was duly commemorated in 1887, the sesqui-centennial of the first was made an occasion of fitting academic pomp in 1904; the third birthday has never been celebrated, but it is, nevertheless, the real birthday of Columbia University as we know it today. At the risk of being fanciful, I might liken the growth of the institution to that of a tree; the roots are laid in the period prior to the Revolution, then a long unbranching trunk up to the middle of the nineteenth century, nearly a hundred years of slow development without expansion. Following the Report of 1857 came the budding of the great branches which more than anything else were to change the small, almost parochial college into the great university of to-day. The crown of the tree was to come long years later, but it never could have been formed without the work of the men of 1857, who mark the conscious beginning of the University. It was not so long ago, after all. One of our active trustees to-day was an alumnus of ten years' standing when this report was adopted, and another was an undergraduate in the College.

The movement which began in 1852 upon the suggestion of President King was not indeed the first attempt on the part of Columbia to become a university. As far back as 1774, a proposed Charter of an American University was approved by the Governors of King's College, and forwarded to London. The outbreak of the Revolution, however, left it in some Government pigeonhole, where it doubtless still lies. The contribution of the institution to those stirring times was made indeed rather through the students—Hamilton, Livingston, Jay, and others—than through the faculty and governors. A second attempt was made in 1784 when the State Legislature adopted an elaborate scheme for a State university with the old King's College as its core. A third attempt was made in 1810, and a fourth in 1830. The fifth attempt, indeed, was also apparently doomed to failure. The Schools of Jurisprudence, Letters, and Science, founded in 1858, died almost stillborn. The College, however, had builded better than it knew, and from some of the incidental changes made as a result of the long and searching investigation of that day have come the far-reaching results which make this the real birthday of the University. There were two reasons why this fifth attempt succeeded where the others had failed—the first material, and the second spiritual. In 1857, the College was just beginning to see the outcome of the courageous policy of her trustees in holding the land of the institution during long years of bitter and humiliating poverty. In 1820, the total income had fallen to about $13,000. Thirty years later, it was only $15,000, with a heavy debt as a result of successive annual deficits. It was not indeed until 1863 that the increasing income was sufficient to meet the cost of annual maintenance and not until 1872 that the accumulated debts were wiped out. During its early years, Columbia had turned to the State for assistance in times of financial need, and had, it is true, received not infrequent grants, which apparently were given somewhat in the spirit of the man in the parable who aided his neighbor because of his importunity. At any rate, Columbia never fared nearly so well as her northern neighbor, Union College, in the matter of grants in cash. The last gift of the State, the Hosack Botanical Garden (presented as a sort of recompense because a previous grant of land in the northern part of what was supposed to be New York had turned out to be in Vermont), was regarded by the trustees as a particularly white and unwelcome elephant. Indeed, at the time of its transfer, it would not have brought more than $6,000 or $7,000 at public sale. As the city grew, however, the value of this land increased, as did that of the previous grant by Trinity Church in the lower part of the city, and the trustees must often have been sorely tempted to meet their pressing obligations by the sale of real estate. Their courage in holding on, which was strengthened perhaps by some unfortunate earlier ventures, was, as we now know, miraculously rewarded, and as early as 1850 it became clear that the time had come when they not only could but should build for the future. The material prospects of the College, in a word, were wholly different from what they were at the time of the previous efforts toward expansion.

The second and even more important factor was that of human personality. The newly elected president, Charles King, was a man of experience and broad point of view, and it was he who in 1852 called attention to the opportunities and responsibilities of the College for the future. It is characteristic of Columbia, however, that the actual constructive work was done by a group of men in the Board of Trustees. The original committee on the college course was selected by ballot and consisted of William Betts, Dr. Henry J. Anderson, and Hamilton Fish. In its preliminary report, it recommended the immediate removal of the College from the site in Park Place and endorsed in principle the establishment of a university system in addition to the undergraduate course. The Rev. Dr. John Knox was added to the committee in 1854. It is interesting to remember that the work of the committee was carried on through a period of the bitterest controversy regarding a certain professorial appointment, so heated that it was impossible for the College to celebrate its one-hundredth anniversary in 1854.

Another element was the growing consciousness of New York that she was becoming a metropolitan city. It was too early to expect this consciousness to appear in individual gifts, but a good example of the widespread interest in the work of the College was shown by the offer of Peter Cooper to permit the so-called university courses to be held at Cooper Union. Finally, one must not forget the changing intellectual spirit of the time. As Mr. Low has pointed out, the American college in its beginning was simply an English college transplanted to American soil. It trained many forceful and effective men, but it did not make many scholars. By 1857, however, there were about one hundred and fifty men in America who had received training in German universities, and their influence was beginning to be felt. West Point, too, was at the height of its influence, and the thoroughness and efficiency of its teaching is constantly referred to in the report.

Before taking up in detail the work of this committee, it may be well to consider for a moment just what it had to work upon. Columbia College, in spite of small numbers and its almost wholly local appeal at the time, had an honored and historic tradition. The broad basis of religious toleration in its original charter was doubtless due to controversy and resulting compromise at the time, but, none the less, the charter is one of the most interesting and significant documents of the eighteenth century in America. The College, too, had never wholly forgotten the prophetic vision of its first president, Samuel Johnson. The high proportion of the alumni who had achieved national distinction is another factor not to be overlooked. In the "History of Columbia University," Dean Van Amringe has given a most impressive summary of these men and their accomplishments.

Although the number of students had remained at about one hundred and fifty from 1820 until almost 1856, and although its make-up was almost wholly local, Columbia College was not without very considerable prestige, particularly so far as instruction in the classics went. It was generally recognized as representing a higher type of instruction in this field than did the New England colleges. The College was, however, hardly more than what we would to-day call a high school. Indeed, it was founded originally on the model of Eton, rather than of Oxford. The students were young, averaging, as we learn from the report of the committee, almost two years less than at Princeton. The type of instruction was elementary, four weeks of each year being given over to review. The energies of the teachers were devoted in large part to matters of minute discipline. There was practically no scientific equipment, and the library, though better than the average, was but little used. President King's published views on the "evils which must result from desultory reading" seem to have expressed the general point of view of the faculty.

Except for a grammar school which was soon to pass to other hands, instruction was given only in the undergraduate classical course, wholly prescribed. The pioneer medical school, founded in King's College, had parted company from Columbia forty years before, and the intermittent lectures in law, historically famous as the groundwork of Kent's Commentaries, were no longer given.

The committee went about its work in a thorough manner. Each member of the College staff, including the president, gave extended testimony before the committee, and, although it is clear that perhaps the majority were in a rut, two men at least were able to give advice of real significance—one of the elders, Anthon, and the youngest member of the faculty, McCulloh. In addition, the committee obtained the testimony of a dozen representative educators from outside, including Professor Lieber of the University of South Carolina, who made so strong an impression that he was shortly called to Columbia, President Francis Wayland of Brown, Professor Bartlett of West Point, whose advice was admirable, President Mark Hopkins of Williams, Chancellor

Tappan of Michigan, and Bishop Horatio Potter. The members of the committee also visited other institutions. The report with the testimony makes a volume of seven hundred pages of most interesting reading. It must not be forgotten that the committee was originally one on the college course and that much of its work had to do with the details of collegiate instruction, and, unfortunately, of student discipline. The misdemeanors of undergraduates are given in delightful detail, including, for example, the expulsion of an undergraduate (who has since worthily represented the United States at the Hague Peace Conference) for throwing shot about the classroom. Fortunately, the culprit was reinstated. Other offenders later served their Alma Mater as trustees. From the outsiders, the committee perhaps got more advice than they bargained for. Francis Wayland, for instance, who writes " as an elder soldier, not a better," tells them frankly that they have too great confidence in the efficacy of laws for the government of a college. Wayland, indeed, saw more clearly perhaps than any of those concerned in this movement the ultimate destiny of Columbia. In closing his testimony, he writes: " When I think of your position, I tremble at the responsibility which rests upon you. You have a noble field before you, the noblest probably now on earth." And this was written about a college of one hundred and fifty disorderly boys.

In spite of the extraordinary broad-mindedness of this committee of the trustees, shown both by their manner of gaining information, and by the report which they finally presented, curious examples of narrowness crop out here and there. The fact, for example, that three of the professors " wrote books " is solemnly noted as a possible cause of educational inefficiency. The members were greatly concerned with matters of student order and, in spite of Wayland's warning, were busy devising methods to enforce it by law. They had an almost pathetic trust in the efficacy of text-books, even for graduate instruction, and needed a sharp reminder from Chancellor Tappan that such a thing as academic freedom was either possible or desirable.

On November 27, 1858, the committee presented its report. It was evident from the adoption of the Statutes, which put the report into actual effect, that the trustees realized two things: first, that their responsibility was far greater than their operations at that time would meet; and second, that what they were destined to do must come by growth, not by creation. They knew that the demand for higher instruction must be created, and created primarily by the appointment of teachers of the highest type.

One example of the new spirit is shown by a resolution authorizing an appropriation of $200 "to test the advantage of instructing the students of the College in Chemistry with the aid of experiments and manipulation performed by the students themselves under the direction and superintendence of the professor." This sum given in 1856 was of more significance than the present annual appropriation for chemistry, although the latter is more than five hundred times as large.

An essential feature of the scheme was the calling of visiting professors of distinction to give "university" lectures. That the men and their subjects were wisely chosen needs no further proof than the fact that Marsh's "History of the English Language" and Guyot's "Earth and Man" were based upon lectures given at Columbia at this time. Although the plan was not practically successful and was soon abandoned, its interest to us is not merely as a forecast of the elaborate system of exchange professorships in operation to-day, but it had an immediately practical result in the calling of two of the visitors to chairs at Columbia—Lieber and Dwight. Lieber, with Nairne, Davies, and Peck, who were appointed during the same period of hopeful expansion, immensely broadened the intellectual horizon of the College. The appointment of Dwight was even more significant, for with it began what President Barnard called the period of the professional school. It must be remembered, as Professor Lee has pointed out, that the beginnings of professional education in America are found not within institutions of learning, but in the familiar personal association of the students with men in active practice. When in 1858 the trustees appointed Dwight as professor of law, it was not their intention to establish a professional school. They soon came to the conclusion, however, that success was more likely should the work be organized with a view to actual admission to the Bar. The prompt success of the Law School and its rapid growth were without parallel in the contemporary history of professional education. Although the Columbia Law School had about eighteen predecessors, it had, by the third year of its existence, taken the lead in numbers and prestige. Its success was wholly due to the extraordinary teaching ability of Professor Dwight. For more than twenty years he gave all the instruction to candidates for a degree in law. The Law School, however, was not to stand alone. As a result of the new attitude of the trustees, the College of Physicians and Surgeons was in 1860 brought back to Columbia. The School retained its independence, and indeed the alliance with the College was but a tenuous one; still the fact that it was made at all is of significance. In 1863, during the period of depression and uncertainty caused by the Civil War, an even more important step was taken. Thomas Egleston was the spokesman of a group of men who desired to establish a School of Mines in America, and a formal communication from him was considered by the trustees in April, 1863. At that time, there were but six schools of applied science in the United States, including Annapolis and West Point, and there was no training in mining engineering. In view of the financial stringency caused by the war, the trustees felt that they could offer merely a habitation on the Columbia campus, but this was enough for Egleston and his colleagues—General Vinton, who, like Egleston, had been a student at the Paris École des Mines, and Charles F. Chandler, a graduate of Göttingen and at the time a professor in Union College, then perhaps the most progressive of American institutions. They received the cordial co-operation of the professors of science who were already members of the College, and three years after its foundation Professor John S. Newberry, the distinguished geologist, came to the School. Like the Law School, the new School of Mines gained prompt success, and its influence on the institution as a whole was even more marked because of the larger number of men who were drawn into the academic family, and the immediate influence of their ideas upon the instruction of the institution as a whole.

One important feature of the Statutes of 1858 was the splitting off of the senior year from the rest of the college program, and the establishment of specialized work for seniors. Although this was abandoned three years later, it laid the foundation for the characteristic

Columbia policy of the combined collegiate and advanced or professional course.

When one considers the things which the report of 1858 failed to accomplish, one must remember several factors. Even if the Civil War had not broken out, the trustees' plans would probably have proved in advance of the times. We must remember that Johns Hopkins was not founded until nearly twenty years later, that no well-organized graduate instruction was given anywhere in the United States until in 1861 at Yale, and that Harvard conferred her first degree of doctor of philosophy in 1873. The university plan failed not because of intrinsic defects, but because it was put into operation two decades before the American public was ready for it. President Barnard himself realized that the scheme as proposed was too abrupt and too large, and too much in advance of the public sense of the educational wants of the day, and that its practical significance lay in the establishment of the Schools of Law and Mines.

It is indeed characteristically American that the path of progress and development at Columbia was not directly through pure science but through the applied sciences. Someone has said that the only things we have to-day that our ancestors had not are more complete knowledge of the laws of nature and more willingness to apply them, and that the willingness to apply usually precedes the desire for knowledge.

In this connection it is interesting to remember that many of Columbia's most distinguished investigators in pure science received such formal training as they got in schools of applied science. For example, Bard, Mitchill, Hosack, Anderson, Torrey, Newberry were all graduates of medical schools. Woodward, Britton, Kemp, and others were trained as engineers.

Not the least significant evidence of the renascence of 1857 was the type of man selected to succeed President King upon his retirement in 1864. Curiously enough, Frederick A. P. Barnard, a former chancellor of the University of Mississippi, had been a candidate for the professorship of physics at Columbia the year before, but was unsuccessful, the appointment going to Professor Rood. At the time of his appointment as president, Barnard was no longer a young man. He had indeed been a schoolmate of Mark Hopkins. He was older when he began his incumbency than was Seth Low when he ended his to become mayor of the city of New York. Barnard, nevertheless, was young enough in spirit for his task. It is hard, says Professor Munroe Smith, to rate too highly the prompt courage with which he adopted the university policy, or the stubborn faith with which he predicted its ultimate triumph.

Dean Van Amringe describes Barnard as " a man of extensive and profound knowledge of many fields, an exact scientist and an elegant classical scholar, a poet, a musician of no mean quality, of strong imagination and enthusiastic temper, long a student of education in all its aspects, with a deep and growing sense of the inadequacy of educational opportunities and methods, with a prophet's vision of the coming exactions of the future and of the way to meet them; bold in the statement of his views, persistent and eloquent in their advocacy, and incapable of discouragement."

We have to look back to Samuel Johnson to find a president who had the same buoyant confidence in the future. Barnard foresaw the destiny of Columbia, although he realized that it would not come in his own day. In spite of very scant encouragement, he held the noses of the trustees to the fundamental problems which he realized must be solved before Columbia could become a university. He urged from the first that her need " must be measured not by the presumed interests of a limited and narrow sphere, but by the urgent ones of a bold community; that, in so far as New York comes to college, it in a most effectual manner helps itself." He attributed the absence of private munificence, rightly, to lack of enterprise on the part of the trustees. " While the funds entrusted to us are not given us to waste," he told them, " so neither are they given us to hoard."

To one who never had the opportunity of knowing Barnard personally, the man lives and grows in his reports. In the words of the present Barnard Professor of Education, Dean Russell, these reports during the twenty-four years of his presidency " are unexcelled in the literature of American education. No current problem escaped Barnard's attention and every problem that he discussed was thereafter the easier of solution, because of his comprehensive view and convincing argument." Buried amongst trivial details as to the text-books used by freshmen and sophomores are found utterances of real prophetic import. No one who reads the reports of 1881-83 would realize that in Barnard's first report there is a warning against the " recent and very plausible theory of Darwin." Such development would be remarkable in any man, but is marvelous in a man who wrote these great reports after he had passed threescore years and ten.

Let me give the list of some of the topics considered by Barnard in his 1881 report, written at the age of seventy-two:

The entrance age of college students.

The effect of voluntary classes upon scholarship.

Discipline and student self-government.

The imperfection of preparatory instruction and a mode of improving conditions.

Education as a science, and the establishment of a special chair and a department in this field.

The degree of master of arts in course.

The higher education of women and the recommendation that women be admitted to Columbia College.

Special report on the several schools of the University.

His work for Columbia was too many-sided to be readily summarized, but it falls perhaps into the following groups: (1) The modernizing of the curriculum of the undergraduate college, and of its administration. (2) The establishment of graduate study upon a permanent basis. (3) The development of the several professional schools of the University. (4) The movement for the professional study of education. (5) The campaign for the higher education of women.

Barnard kept a jealous eye on what was happening elsewhere and found why it was happening. He was perhaps the first American educator to use the statistical method so common to-day to clear up problems on which he was in doubt, and to prove his point in argument. He watched closely the striking success of Cornell from its very foundation to see what lesson it could teach the older colleges. He perceived that Harvard was outstripping his own Alma Mater, Yale, in numbers, and analyzed the reasons for the benefit of Columbia. He attributed Harvard's growth to the elective system, which by the way he had himself advocated before it was adopted at Cambridge, and annually furnished the Columbia trustees with illuminating details, showing the growth of Harvard at the expense of her sister institutions in the East. As rapidly as the faculty and the trustees would permit it, he introduced the elective system at Columbia, on the ground that under the old fixed curriculum the American college had for a quarter of a century been endeavoring to accomplish what it could not perform. Finding no reliable statistics as to student enrollment throughout the country, he laboriously built them up for himself from the original sources and printed the results. These showed clearly a dropping off in college attendance, proportionately to the population, and Barnard closed his study with these characteristic words: " As the truth, which time silently discloses, even though unwelcome must be recognized and distinctly uttered sooner or later by somebody, it has fallen to the undersigned in this case to be the interpreter of events which he accepts as he finds them, but which he would not be understood to contemplate with entire satisfaction or even without some serious concern."

He entered each of his multifarious campaigns exhilarated by the joy of what Professor Trent has called the only rational form of aggressive combat—that for ideals against prejudices—and he found, I may say in passing, enough prejudices to keep him in a state of continual exhilaration.

In his advocacy of the elective system, Barnard was influenced perhaps primarily by the fact that " the adoption of a liberal system of elective study prepares a college to rise naturally and easily to the higher level of post-graduate instruction." He saw that " it is probably only by some gradual transformation of existing institutions that we shall in this country ever be able to realize the ideal of a continental university." But he also believed in an elective system for the sake of the undergraduates. In his judgment, by the age of say eighteen, the mind has normally taken its set and the area of diminishing returns has been reached with regard to disciplinary training in uncongenial subjects. The actual beginning of an elective system in Barnard's time was made when the class of 1870, of which Seth Low was a member, made formal application for elective privileges in the senior year, as a result of which some slight provision was made by the trustees. As soon as the elective policy made it possible for the students to take advantage of it, Barnard established work in new fields. Professor Brander Matthews, who was a member of the class of 1871, tells that in his day there was no provision for instruction in the language or literature of France, practically no history, and but one hour a week of political economy. Barnard succeeded in getting good provision in the modern languages and in the field of political science. He pleaded also for opportunities in biology, which were not provided until the administration of his successor, and also for the establishment of an adequate department of the fine arts, which unfortunately is not yet accomplished.

Barnard realized that the colleges continued to recognize their assumed obligations as responsible guardians of students' morals, although one by one they had relinquished the instrumentalities by which alone they had been enabled to discharge them. He pointed out the folly of expecting that, when the system of physical restraint and immediate supervision had been abandoned, the same end could be secured by means of written laws providing claims and penalties for specified offenses. He showed the serious danger that lay in the existence of a body of unenforced and unenforceable statutory enactments.

At Columbia, Barnard found an elaborate, artificial, and ineffectual system of student rating, which he broke down as promptly as he could. Wherever possible, he cut ruthlessly through obsolete and useless machinery which had persisted from the days when the College was really a preparatory school; for he realized that then, as now, the great body of young men in college are really interested in study, and that for this majority elaborate machinery to make them study is wasteful and foolish. Owing to the fact that at the start the trustees did not feel themselves responsible for the School of Mines, no elaborate system of rules for students was devised for this school. The president was prompt to point out that the students got on just as well without them, and, using the new school as an example, he brought about some relief from the burden of regulations previously endured by the college students in arts.

In 1881, he considered and advocated the development of student self-government, pointing out the students' evident ability to manage efficiently their own voluntary undertakings. From what alumni of his day have told me, Barnard was easily deceived in the matter of student disorder; the service which he rendered in giving the serious students a sense of responsibility and academic dignity, however, cannot be regarded as unimportant, and some of them, at any rate, were made to realize the folly of a system of ethics which regards serious offenses as trivial, merely because performed by college students.

He endeavored to interest the parents of students in the academic progress of their sons, a discouraging but not a hopeless undertaking. He tried to systematize and make more logical the business of getting students into the college. In one of his reports he proposed something very like the present College Entrance Examination Board. He realized the importance of faculty guidance in the matter of elective studies and also the importance of getting information from the teachers in preparatory schools regarding the students coming to the College. These two matters are now part of the regular machinery of Columbia College, in the work of the student's academic advisers, and of the University Committee on Admissions.

Throughout the whole institution Barnard endeavored to make it clear that the ambition of students and teachers should be the mastery of subjects rather than of books. For the private work and growth of professors, he urged the need of separate studies for all members of the teaching staff.

In making provision for the beginning of graduate, or as he called it, university instruction, Barnard was not deterred by the necessity of small beginnings. " The university system," he wrote, " is destined to establish itself in our country. It will be the outgrowth of our existing college system. Our universities will be evolutions and not new creations. They will be formed by the expansion of the system of post-graduate instruction. Few colleges, however, are likely to become universities. Columbia College, through her financial strength and her position in New York, will be among those few. The time has come when she should begin to address herself to the duties which touch a prospective destiny and the responsibility involved." " Limitation of knowledge is not," he says elsewhere, " like deficiency of food, attended by a craving for a larger supply. It is characteristic of ignorance to be content not to know, and of partial information, to be puffed up with the conceit that there is little more to be known. . . . The fact regarding the higher education is not that the demand creates the supply, but that the supply determines the demand."

To those who questioned the wisdom of adding to the offering of the institution in view of the existing responsibilities to undergraduate students, he replied that, just in proportion as provision is made by any educational institution for the wants of students of superior grade, in the same proportion its attractiveness is increased for those of the inferior grade.

Barnard had called the period in Columbia's history up to 1857 the gymnasial period, that from 1858 to 1880 the period of the professional school, and that from then on the university or graduate period.

Although, in 1872, Barnard had succeeded in getting the trustees to make provision for fellowships, with the privilege to the incumbent of studying abroad, he had to wait until 1880 for the next important step, the establishment of the School of Political Science. Professor John W. Burgess had been called, in 1876, to the chair of history and political science from Amherst College. It had been expected that his work would be made available for the students of the Law School, and it was the failure of this hope which really brought about the establishment of a separate school four years later, with Professor Burgess at its head, and four other members of the teaching staff, all having been trained in Germany. At first the number of students drawn from outside Columbia College was very small, practically limited to disciples of Professor Burgess from Amherst, but it was this small beginning which laid the foundation for the present graduate enrollment of over two thousand students.

One may here contrast the conditions under which the School of Political Science was established with the unsuccessful movement of 1858. In the earlier experiment the lecturers were made dependent upon the fees of students, and the lectures were thrown open to the public without examination. In the later, instruction was given only by teachers on regular salary and only to college-bred men. It was, as Professor Munroe Smith has said, on this narrower but more solid ground that the Columbia graduate schools have grown slowly but steadily to their present strength.

The system of graduate instruction was rounded out by the establishment at the same time of a so-called graduate department, which meant practically that the more ambitious professors in other fields than that of political science might offer advanced work in addition to their stated collegiate duties. Some graduate work in pure and applied science had already developed under the professors in the School of Mines, and, as a matter of fact, the degree of doctor of philosophy was first conferred at Columbia in that school.

Barnard was one of the first to observe the development of various callings into new professions and to perceive the relation that this fact bears to collegiate and university instruction. He foresaw the coming need of vocational training and endeavored to make Columbia ready to meet it. Throughout his presidency, he consistently urged the raising of the standards of admission to professional study. With the Law School he could do little, for Professor Dwight's commanding prestige, and indeed certain formal resolutions of the trustees, made him practically independent of the president. He did succeed in getting some provision made for entrance tests. So far as the course itself went, it should be said he was entirely in sympathy with Professor Dwight's plan of organization and referred to the school as an example of " the most extraordinary success ever achieved in this country or any other."

He saw the crying need of improvement in medical education, but under the existing arrangement—it will be remembered that the College of Physicians and Surgeons was at that time educationally and financially independent of Columbia—he was powerless to do anything toward its accomplishment.

The prompt success of the School of Mines, however, was due in no small measure to Barnard's enthusiastic support. He was himself a devoted and accomplished man of science and the first college president to be a member of the National Academy of Sciences. To-day, more than twenty years after his death, he still forms a link between the University and the Academy, through the conditions of award of the Barnard Medal for meritorious service to science. He entered eagerly into the aspirations of Egleston, Chandler, and Vinton. Although before his becoming president the trustees had been unwilling to undergo any financial obligations for the aid of the new school, he succeeded in persuading them to borrow more than $100,000 for the purpose and to erect a building for the school to replace the abandoned deaf and dumb asylum where, strangely enough, he himself had taught a quarter of a century before. Barnard was greatly interested in the plan for practical instruction in mining, which originated at Columbia in 1877, and in the organization of professional courses in civil and electrical engineering. It was under the School of Mines also that the department of architecture came into being. The establishment at Columbia of work in architecture was primarily the result of the devoted interest of one of the younger members of the board of trustees, Mr. F. Augustus

Schermerhorn, and it was auspiciously undertaken in 1881 by the appointment of Professor William R. Ware, who had previously founded at the Massachusetts Institute the first American school of architecture. Throughout Professor Ware's long career, he emphasized the idea that architecture is not simply a craft to be learned through apprenticeship, nor a branch of engineering to be taught in a scientific school, but an art to be taught in an environment primarily artistic.

One of the resolutions adopted by the trustees in 1858 looked forward to the establishment of a chair of the science and art of education. No appointment, however, was made and twenty-three years later Barnard could say, as he did in 1881, that " Education is nowhere treated as a science and nowhere is there an attempt to expound its true philosophy." In his report of this year he devoted thirty pages to this topic, advocating particularly a chair of the history, theory, and practice of education. " In doing this we should, for a third time, have taken a new departure, and a step in advance of all our contemporaries and competitors. We have created the first and only successful School of Mines upon the continent; and we have established the only school in which a young man can obtain such a training as may properly fit him for the duties of political life. If into a great national industry which has heretofore been prosecuted by ignorant and wasteful methods we have introduced economy and intelligence, and if in a public service which has been worse than ignorant and wasteful we have, by the instrumentalities we have created, laid the foundation for a coming substantial reform, we have in neither of these ways done more to advance the welfare of our own people, or to benefit the world, than we shall have done when we shall have made it possible that those to whose hands is to be entrusted the education of each rising generation shall be themselves properly educated to their own responsible profession.'' It was the impression made by this report upon the mind of a young undergraduate then in Columbia College which brought about, a few years later, the organization of Teachers College under the presidency of Nicholas Murray Butler. So many of Barnard's long cherished desires and hopes found no realization until after his death that it is pleasant to remember that he was spared to see at least the modest beginning of what has grown into the great Teachers College of to-day.

In 1879, Barnard raised with the trustees the question as to whether the advantages of Columbia College should not be opened to young women as well as to young men. It was a brave utterance at a time when the East was thundering against the inexplicable development of collegiate coeducation west of the Alleghany Mountains. This was the beginning of a long campaign of education for the city of New York, and indeed for the whole eastern part of the country. Barnard was keen enough to make it clear that, if the opponents of the higher education of women proved anything, they proved that young women should not be educated at all. With his characteristic optimism he wrote:

> '' Whatever may be the fate of the present suggestion, the undersigned cannot permit himself to doubt that the time will yet come when the propriety and wisdom of this measure will be fully recognized; and, as he believes that Columbia College is destined in the coming centuries to become so comprehensive in the scope of her teaching as to be able to furnish to all inquirers after truth the instruction they may desire in whatever branch of human knowledge, he believes also that she

will become so catholic in her liberality as to open widely her doors to all inquirers without distinction either of class or of sex."

In his next report he continued the attack, using this time the example of Cambridge University in England. In 1881, he reminded the trustees that the admission of women "being in the direction of manifest destiny, to accept it promptly would be a graceful act; while to lag behind the spirit of the age would be only to be coerced after all into accepting it at last, ungracefully."

The best that Barnard could get from the trustees was a resolution, adopted in 1883, "that this Board deem it expedient to institute measures for raising the standard of female education by proposing courses of study to be pursued outside the College, but under the observation of its authorities and offering suitable academic honors and distinction to any who, on examination, shall be found to have pursued such courses of study with success."

It was not very promising; in fact, it has been said that the resulting collegiate course for women had more than the remoteness of the modern correspondence school, without any of its special efficiency. Those who were interested were, however, too wise to let slip the advantage of any hold upon the rapidly expanding institution. Although, as Barnard pointed out, the course offered no permanent solution to the problem which he had raised, it maintained a languishing existence for many years. Indeed, when I entered Columbia as a freshman, in 1894, there was one woman still on the books as a candidate for the bachelor's degree. It was finally abolished in the following year. The real solution of the problem was, of course, the establishment of the College which bears Barnard's name, and its definite incorporation, more than a decade after his death, into the educational system of Columbia University. The story of Barnard College will be told in another chapter.

There is something pathetic in the fact that, during the years when Barnard was making history for the institution he served, he received very little recognition from those about him. Indeed, it was not until after his death that his importance was realized. Although an impressive man in appearance, his deafness cut him off in large degree. He seemed to lack totally the minor qualities of administrative efficiency, and during the later years of his life the treasurer of the College overshadowed him in matters of administration and the professors dealt directly with their friends among the trustees, in all university projects, rather than through the president. Nor did his impression on the public outside seem to be any stronger. During his administration only one important gift was made to the College, the bequest of an alumnus, Stephen Whitney Phœnix. The gift of the Vanderbilt family to the Medical School came also during his time, but was a result of the activity of the president of the College of Physicians and Surgeons, the late Dr. McLane.

"Barnard possessed, with such men as Gladstone and Bismarck (it is a very rare quality), the fervor in age that he had in youth. He was as ready as he was before he had secured position and fame to take up a new idea, a new project, and pursue it with as much vigor as if a long life were still before him and all his reputation were still before him yet to make." The burden of years and infirmities was weighing, however, even upon his buoyant spirit, and, although he carried on his duties almost to the full fourscore years, the last year or so were certainly full not only of labor but of sorrow. The parts of the institution with which he was particularly concerned—the graduate work, the School of Mines, and the College—had failed to grow as he had hoped. Indeed, toward the end he had about concluded that it would be advisable to give up the struggle of maintaining a first-class undergraduate college, under the conditions confronting him in New York City.

He retired from active service at the close of the academic year of 1888 and died in the following spring, April 27.

During the closing years of his life Barnard's reputation seemed to be that of a very deaf and rather fussy old gentleman who never kept copies of his letters, and with whom for this and other reasons it was most difficult to do business; but as time goes on his figure looms higher and higher and he has now a firm place in the little group of men without whom education in the United States, whatever it might have been, would not be what it is to-day. In this group he takes his place with Thomas Jefferson, President Wayland of Brown, President Eliot of Harvard, and Commissioner Harris of the United States Bureau of Education. Barnard's voice indeed seemed to be that of one crying in the wilderness, but there were fortunately some few who heard and hearkened, most notably the present president of Columbia University.

It was characteristic of Barnard and of his devoted wife, who soon followed him, that they should leave their entire estate to the college they had loved. This made possible the establishment of the Barnard Medal, already mentioned, and of the Barnard fund for the increase of the library, an interest which the limitations of space have made it impossible for me to dwell upon. In 1904, in Barnard's honor, the title of the chair held by the dean of Teachers College was changed to the Barnard Professorship of Education.

Barnard College was founded and named just before his death. May it always maintain the fine spirit of devotion and optimism which it now possesses and which makes the institution a peculiarly fitting memorial to the great president.

II

THE UNIVERSITY OF TO-DAY; ITS ORGANIZATION AND AIMS

Recent Accomplishments. Previous Uncertainty. The University Party. Appointment of Seth Low. The New Order and its Fruits. Continuity of Policy. Significant Contributions. Growth by Treaty. Educational Unity. The University Council. Standardization and Progress. College Admission and Advancement. Professional Study. The Combined Course. Plan of Organization. Trustees. President. Other Officers. Administrative Staff.

How recently, but how fully, Columbia has come to be recognized as worthy of her metropolitan home may be read in the concluding chapter of Dr. E. E. Slosson's " Great American Universities ": " Two decades ago Columbia was a small college with three loosely attached professional schools, crowded in old buildings downtown, and regarded by the outside world as local, sectarian, and unpromising. Now it is metropolitan and cosmopolitan, and, if it continues to progress as it has in recent years, it is likely to take a position among the universities of the country similar to that of New York among the cities." That these changes have not come about without growing pains, and even more serious academic maladies, has been indicated in the introductory chapter; that the net results constitute a significant chapter in the history of education, not only of the nation but of the world, needs no demonstration.

At Columbia in the late eighties, to quote one of the professors then in service, " there existed a state of things which is difficult to describe. There was no feeling of purpose, no agreement as to what was best for the future, no common interest in what was happening in the present. A prevailing unrest, a clash of opinion, and on every side a belief that everything went by chance or perhaps sometimes by favor—these were a few of the obstacles to good feeling and to harmonious effort. Then came Mr. Low, and order was evolved from chaos. Regarding it all in a spirit of detachment, which would have been next to impossible for anyone else, his fitting and perfect sense of justice and fair-mindedness, which is so very rare, inspired everyone from the very first with confidence and loyalty. It was felt instinctively that the right thing would be done, that every interest would be considered, and every question viewed without the slightest prejudice, and it was because of this assurance that the transformation of a small college into a big university was effected so smoothly, so completely, and so successfully as to render possible the achievement of the present splendid promise for its future.''

As a matter of fact, the initial steps toward university organization were taken before the election of President Low in 1889. A majority, indeed, both of faculty and trustees were at that time opposed to change or even to growth. The faculty point of view was frankly expressed as regards salaries by the wife of one of the older professors to the effect that, if the divisor be increased while the dividend remains fixed, the quotient necessarily will be diminished. One of the prominent trustees of the period said authoritatively that Columbia never asked aid of anybody and was not anxious to receive any, lest it might give the donor a claim to interfere with the management of its affairs. The center of the university party, as it was called, was the small compact faculty of political science, with the support of Nicholas Murray Butler, then adjunct professor, and the warden of the Law School, Professor Dwight. It was this group of men that persuaded the trustees of the need for establishing a faculty of philosophy for advanced work and for a central university senate. The initiative for the third crucial project, the reorganization of the Law School, came from one of the trustees, Mr. Stephen P. Nash. It is pathetic to remember that, though Barnard was the real spiritual leader of the whole movement, none of the detailed steps were taken through him. For him, expansion was of supreme interest; problems of organization had little attraction and the progressive professors went directly to the progressive trustees with their plans.

The decisive step was indeed taken in the choice of a successor to President Barnard. That step and the other fundamental advances toward university organization have fortunately been recently described by Professor John W. Burgess, to whom, in President Butler's acknowledgment, " we owe more than to anyone else the form of our University, who proposed it more than thirty years ago and with patient skill, determination, and statesmanship has ever since helped to work it out, first in one faculty and then in another." In Professor Burgess's " Reminiscences " we read that it was now felt by all who comprehended the situation clearly that everything hung upon the choice of the new president:

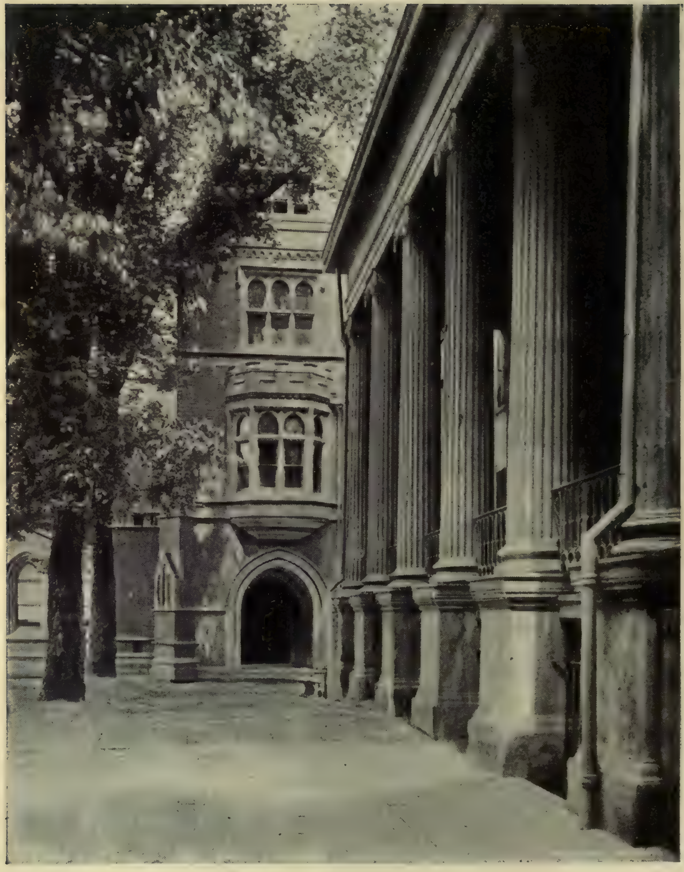
> " On account of the sharp dissensions in the teaching body, it was not possible to take any member of either faculty for the presidency, and it was even impracticable to ask the advice of any of them upon this all-important question. The trustees were thrown entirely upon themselves in making their selection. They very wisely determined to confer the great office upon

one of their own number and acted just as wisely in choosing that one. Mr. Low was not, in the first place, a profound scholar, though not lacking in broad learning and intellectual sympathy. In this there was great advantage, an advantage which Mr. Low himself consciously appreciated. It was this very thing which enabled him to see that each professor could manage the internal affairs of his department better than the president could do it for him. The professors were quick to comprehend the president's estimate of them and to manifest, as a consequence of it, a new enthusiasm in their work. This alone was a mighty step forward from the school to the university. On the other hand, Mr. Low was a real man of affairs. He had been partner in a great business and mayor of a great city. He was a man of high social standing, of extended acquaintance, and of large wealth. He knew how to organize and administer, how to frame a budget, how to provide ways and means, how to take advantage of all the existing auxiliaries offered by existing institutions in the great city, how to bring the University to the notice of the city, the nation, and the world, how to interest men of power and wealth in it, and, above all, how to secure for the chairs of instruction men of ability and marked distinction in their several departments. President Low emphasized at all times and on all occasions the proposition that a great university is, in essence, a body of great investigators and teachers. In all of the necessary work of organization and amid all of the details of administration to which he was compelled by the situation to give extraordinary attention, he kept the great purpose constantly before him of bringing to Columbia such a body of men; and his success, in this respect, equaled his determination. The careful and wise selections which he advised and procured in strengthening and recruiting the existing faculties and in contributing new faculties gave to the University that strong scientific groundwork upon which it has since then so securely rested. These were all great qualities, qualities absolutely necessary for the development of Columbia at that stage of its history.''

The three long conferences about university organization following Mr. Low's taking up his work, were held in the old President's House on Forty-ninth Street. The party of progress, though in a strong minority, was well organized, and divided among its members the different aspects of the problem to be brought forward. It had, furthermore, the intelligence not to press forward too rapidly. As a result, this party won a complete victory and placed an impress on the organization of the institution which is still clearly borne.

The first outward and visible sign of the new order of things was a provision that students should matriculate simply in the University, paying a single fee, and that thereafter they should enjoy the facilities offered by every faculty. In Mr. Low's phrase, Columbia at one stroke ceased to be divided into fragments and took upon herself the aspect of a university, where each department was related to the other and every one strengthened all. In this and other ways an elasticity was given to the organization which it had previously lacked almost wholly, and this fact had its share in the infusion of a spirit of buoyancy and a sense of team play. No one can read the records of twenty years ago without getting a realizing sense that the old institution had at last found herself and was a living entity. In particular, an article written by Professor Brander Matthews in *Harper's Weekly* during 1892 gives a fine picture of the spirit of enthusiastic optimism in which Columbia was preparing herself for the great advances she was about to make.

The teaching staff was strengthened to an amazing degree, both qualitatively and quantitatively. It does not detract from the credit due to Mr. Low to point out that in this respect he had an extraordinary opportunity.



Columbia at Forty-ninth Street

In the first place, the income had been considerably increased through the expiration of leases and their renewal at an increased rental. When the trustees were in doubt as to the propriety of applying University funds to some new fields, it should be added, Mr. Low, in not a few instances, supplied the funds from his own pocket until the experiment was a proved success. Secondly, Columbia was at the moment almost alone in the market. There was no similar period of growth elsewhere in the eastern United States, and the State universities were not yet the successful bidders for men of performance and promise that they have since become. Last but not least, the home ranks were not filled with juniors of respectable but not brilliant attainments, who would, if they had been on hand, in all probability have stepped into the new places.

As a result of all these facts, but most of all as a result of the admirable judgment of Mr. Low and his advisers, a group of men was called to Columbia during his administration, which, in addition to the men already in service, did more than the administrative and educational reorganization, or the new buildings, to bring Columbia into the front rank of American universities. Time has removed all but five of the professors of Barnard's day from teaching service, and the men appointed under Low form the backbone of the University.

The academic world at large soon came to know of the new order of things by its fruits,—groups of young doctors of philosophy who are to-day in positions of leadership all over the country, and scholarly publications of importance in many different fields from both teachers and advanced students.

The eleven years of Mr. Low's presidency witnessed in all its many steps one of the most remarkable changes in physical habitat in the history of any institution of learning. The important influence of this physical change upon the educational prestige of the University need not be emphasized. In all this movement the president not only gave the most devoted attention to every complex detail of removal and construction, but he was the leader in the campaign for that outside assistance which made the plan possible. Finally, he crowned his service by the gift of a magnificent library building as a memorial to his father, Abiel Abbot Low. This building has taken its place among the small group of examples of really great architecture in America.

From the day when Mr. Low found himself firmly in the saddle until the present, there has been no sharp break in the development of the institution such as came with his election, not even at the time of his retirement in 1901 to become mayor of New York City, and the election of Professor Butler as his successor. New elements have indeed entered; older ones have developed, or perhaps in some cases regressed, but the stamp was set at that time and has not been changed in any fundamental particular. The distinction has been made that President Low brought a group of loosely organized schools into administrative unity; and that it was President Butler's task to bring them into educational unity; and it would of course be possible to point to contrasts in emphasis and interpretation, such as would naturally arise from the differences between two vigorous and strongly marked personalities. The differences, however, are less significant than the essential unity of the two administrations. Unlike Presidents King and Barnard, both men were graduates of Columbia College, from the classes of 1870 and 1882 respectively, both led in study and undergraduate life, as they did afterward as alumni. Even before 1890, the younger man was a leader in the university party, and he was President Low's right-hand man and trusted adviser, particularly in matters having to do with educational theory and practice. The ideals and the accomplishments of both men may be summed up in the eloquent words of Dr. Butler's oath of office, taken on April 12, 1902:

> "To preserve, protect, and foster this ancient college, established for the education and instruction of youth in the liberal arts and sciences; to maintain, strengthen, and uphold this noble university; to obey its statutes; to labor unweariedly for its advantage and for the accomplishment of its high ideals; to promote its efficiency in every part, that it may widen the boundaries and extend the application of human knowledge and contribute increasingly to the honor and welfare of the city, state, and nation—I pledge my strength and whatever abilities God has given me. By His help I will."

Neither president would wish to regard the happenings of his administration as primarily personal achievement. "Anyone," as Dr. Butler has said, "who writes the history of universities in the terms of the personal characteristics or the accredited achievements of their presidents falls far short of the real truth. The incumbency of a university president is like the reign of a monarch or the rule of a president, convenient as a standard of measurement, but it is the men of letters, the men of science, the men of vision, the men of accomplishment who are remembered in that administration, who give to it meaning and form. Just so we remember Shakspere, but we have to turn to the encyclopedia to find in whose reign he lived."

As a result of the essential unity of administration, a minute chronological record of the developments since 1890 is not necessary to obtain an understanding of the present organization and equipment of the University, nor of its significant contributions to the problems of higher education. Before giving what at the best must be a very incomplete description of so complex an organism as Columbia has now become, it may be well to summarize these contributions.

In the first place, Columbia has achieved a much closer interrelation between its different parts than is the case in most of the great universities of the world. This has resulted not only in saving useless and wasteful duplication, but it has served to bring to each of its many interests the stimulus and helpful criticism of all the others. Perhaps the most fundamental devices for bringing about this unity are the central academic senate, known as the University Council, and a type of departmental organization which cuts across school and faculty lines. In the second place, there has been a conscious effort on the part of the University to get the most from the community at large and in return to give the most possible to it. It has been its constant aim to develop those powers and opportunities that depend upon mutual co-operation, and no institution in the country has advanced so far as has Columbia along the lines of what has been called the policy of growth by treaty with other independent institutions. This policy has the great advantage of preserving the initiative and devotion which come from a sense of independence on the part of the smaller organization and at the same time conserving a general unity of aim and economy of effort in solving the problems of the community.

In the third place, Columbia has given particular attention to the relation between collegiate and professional courses with a view to ensuring an adequately high standard of preparation for professional study without undue waste of time and energy on the part of the student. The so-called combined course, which permits the undergraduate student to begin professional study before receiving the bachelor's degree and to offer toward that degree one or, in some cases, two years of professional school work, a plan now in operation directly or indirectly in every university of the country, was devised and tried out first at Columbia.

In the fourth place, particular attention has been given to what is now becoming known in industrial organizations as functional administration. The essence of this policy is the centering of responsibility for carrying out any adopted policy upon carefully selected individuals, who are expected to make themselves experts in their particular field. This policy has come rather late into university administration, but it is now throughout the country rapidly supplanting the earlier policy of administration by faculty committee.

In student registration Columbia has grown from 1,768 in 1889 to 9,379 in 1913. Thirty-one per cent. of the latter figure is made up from registration in institutions which have since 1889 joined the University system without losing their own independence and identity. Not a few of the other students also, particularly those in the graduate schools, have been attracted to the University by the opportunities which its alliance with the several museums and other scientific organizations of the city have thrown open to them.

The definite absorption of the hitherto independent College of Physicians and Surgeons, in 1891, was followed by the incorporation into the University educational system of Barnard College and Teachers College, the Vanderbilt Clinic and Sloane Hospital, and by alliances for the common good with seven theological seminaries, with the New York Botanical Gardens, the Metropolitan Museum of Art, Cooper Union, the American Museum of Natural History, the Zoölogical Park and Aquarium—a record probably without parallel.

The New York College of Pharmacy, under the following administration, was also taken into the educational system of the University. A close alliance has been formed with the New York School of Philanthropy, and a reciprocal agreement of great importance to the future of medical education has been arranged between the University and the Presbyterian Hospital. Finally, international agreements as to visiting professors have been made with Germany, Holland, France, and Austria.

The most significant of these relations and those touching the university life most closely are the ones with Barnard College and Teachers College. The identification of the former with the University is completer, both because Barnard grew up under the wing of Columbia and because of the identity of interest within university departments, but in each case the alliance is close and contains elements of first importance in our university life. Previous to 1900 Barnard had been under patronage rather than in alliance, and the agreement of 1893 with Teachers College had been neither close enough nor organic enough to accomplish its purpose. Indeed, neither institution appeared at all in the Columbia catalogue until 1897. Their present relations date from 1900, the agreements of that year having since been amended only in detail. These provide that the president of the University shall be, *ex officio,* president of each. He presides at faculty meetings and has general supervision and direction of their educational administration, as is the case with the other schools of the University. The internal administration of each is conducted by the dean, appointed by the president, by and with the advice and consent of the trustees of the independent College, which during the life of the agreement waives the right to confer degrees. The students share in all general University privileges, as for example in the use of the library, and the faculties share in the general academic responsibility and control through their representatives upon the University Council.

Strengthening the letter of these alliances is the bond of a community of interest, which furnishes frequent examples of what are unofficially known as academic intermarriages. For example, twenty-eight members of the Barnard College faculty sit also in other faculties of the University, ten men whose salaries are paid by Teachers College are in the faculty of philosophy, three in that of pure science, and two in political science. Between the University faculty and the seminaries, museums, and so forth, there are a dozen examples of such personal alliances.

What is gained and what is lost by agreements of this character? To speak first of the latter, it must be confessed that co-operation does not always work. Yale and Columbia have failed to do what they had hoped for the consular service, and thus far the agreement with the National Academy of Design appears to have accomplished less than nothing. An inevitable tension, furthermore, comes at times with separate financial responsibility, and the relations between two of the smaller independent corporations are not always made easier by their common relation to the University Corporation. There is, undoubtedly, a monetary loss to the latter from the alliances, because so many overhead charges are borne by it alone and the balance of educational trade is, from a financial point of view, practically always against it. There are those who say, furthermore, on the principle of the more fishers around the pond, the fewer fish for each, that many of the splendid gifts that have come to the other corporations would have otherwise fallen directly into the University coffers. Even if this latter were true, which may be doubted, the general advantages of the policy far outweigh its drawbacks. The clear-cut needs and independent initiative of the smaller independent corporations make appeal for aid more vivid and usually more successful. It is easier, in a word, to get something in particular than something in general. Since the University makes no attempt to dominate, and neither patronizes nor pauperizes, there is a general spirit of co-operation in all the parts of the complex organism. The wealth of opportunity to the student in every part is immensely increased. To give but a single example, the catalogue will show how greatly the program of the University department of history is strengthened by professors of church history from Union Theological Seminary who sit in the faculty of political science.

It is almost too early to speak of the relations which bring visiting professors to us from across the Atlantic, but there is no doubt as to the profound significance of the movement. My personal hope is that the future will bring closer relations, and in particular more academic exchanges, among the colleges and universities of the United States, a subject to which I shall return in the concluding chapter of this book. The success of the

Columbia policy of increase of opportunities by treaty seems to point the way logically to such a development.

President Low's first task was to create a center for the academic mass, for he did not feel that the university, like Pascal's definition of the universe, could be a sphere with its center everywhere and its surface nowhere. Professor Burgess had long advocated an academic senate, and the trustees had authorized one before Mr. Low's election. It was, when organized in 1900, hardly more than a president's advisory committee, with special interest in the organization of graduate work, but it fulfilled the one essential condition in that it was felt to be and was accepted by both trustees and professors as thoroughly and fairly representative of the entire institution. Two years later, definite administrative and legislative powers were assigned to the Council and the *University Bulletin* reported in 1892 that it " has now become a legislative body for the whole institution, subject only to the confirmation of the trustees as to certain matters. The teaching force itself is now for the first time in a position to shape the educational policy of the University in all its parts. Columbia is thus nearing the practice of the great European universities." As a matter of fact, it was for some years little more than an upper house for the non-professional faculties. Under the revision of the University statutes in 1908, which marked the logical completion of the process begun in 1890, the Council was reorganized, its constitutional powers greatly enlarged, and its membership increased, the representatives elected from the several faculties, however, still being in the majority. The routine matters, practically all relating to graduate instruction and the appointment of fellows, which were formerly debated in the Council as a whole, are now cared for in an executive committee. The Council can thus devote adequate attention to those broader questions which concern the entire University. By statute it is directed to secure the correlation of courses with a view to increasing the efficiency and enlarging the range of university work, to encourage original research, and to adjust all questions involving more than one faculty; and also to make recommendations, both to the trustees and to the several faculties, concerning the educational administration of the University, and to advise the president upon such matters as he may bring before it.

The body has been called, by one of my colleagues (not an engineer), the mainspring and flywheel of the institution, and it is indeed the point of articulation in educational matters between the representative government of the faculties and the centralized administrative organization. Like many another constitutional body of essential importance, its actual proceedings seem frequently to be trivial and dull, but its influence lies not so much in what it actually does as in what it could do should occasion arise.

A searching of the University heart took place in 1908-09, under the probe of a committee appointed by the University Council at the request of the trustees, to consider possible changes in the requirements for admission and the conditions of graduation in the various professional schools, and to report, also, as to whether any elective or optional courses offered to the students might be discontinued without disadvantage to the general educational interests of the University. The committee took its duties very seriously and made a close study of the conditions throughout the University, and particularly in the Schools of Law and Medicine, and the Graduate Schools. As frequently happens in such cases, the real value of the work, which was very great, lay not so much in the formal report to the University Council, which is rather a vague document, but in the fact that the investigation had been made in such a way as to affect the judgment not only of its own members, but also of all the more serious members of the academic community. In this way its effect upon the public opinion of the University was very strong and is still felt.

Those parts of the University—such as the Summer Session, Extension Teaching, Journalism, and Agriculture—which are not under the control of some particular faculty, are under the special care of the Council. Its responsibility is also great in the case of the relations between the University Corporation and its treaty allies. To quote Professor Munroe Smith: "In the whole process of expansion by treaty, the University Council has proved itself an instrument of great value. . . . It is not too much to affirm that it is the Council, itself a new thing in university government, that has made educational federations of this new type possible, and to assert that this representative council will so largely insure the satisfactory workings of these federations as to make them permanent."

For the future the Council seems destined to give more and more study to the rapidly disappearing frontiers that were once so clearly marked between the several departments of knowledge, and to new groupings of subjects needed to meet new public demands constantly arising.

The maintenance of what we regard to-day as adequate standards of admission, advancement, and graduation is a comparatively recent matter in America, and this is particularly true as regards professional study. The first entrance requirements for the School of Mines were limited to elementary algebra, geometry, and trigonometry. It was not until 1875 that there were any entrance examinations at all for the Law School. The entire course in medicine was not so long ago of but four months, and as late as 1888 its entrance standards were *advanced* to the requirement of elementary English, Latin, and mathematics. Those in the Law School did not reach the basis of high-school graduation until 1893.

The amount of time devoted to academic work was until a few years ago very modest. Professor Burgess, when he came to Columbia in 1876, found that " the School of Arts made the decided impression of a day school for the sons of residents of New York who came rather irregularly to the exercises at about ten o'clock in the morning, attended recitations until about one, and then went home again. What they did in the way of study during the afternoons and evenings was not very apparent in their recitations of the following day, and, as most of them lived with their parents, it would have probably been regarded as an impertinence on the part of their teachers to have inquired more nearly into this subject."

Until recently, Saturday was a *dies non* in the academic calendar. In 1892, the beginning of the day's work was moved forward to half-past nine, and in 1907 to nine o'clock. To-day certain classes begin at eight o'clock, and in the Summer Session this is regarded as rather a desirable hour. Work now continues until ten o'clock at night, winter and summer. The establishment of summer and extension courses and the fact that the half year is now the unit of administration and that the student may profitably enter in February as well as in September, have added to the actual opportunities which Columbia affords no less than have the increases in staff and equipment.

Perhaps the best points at which to study the standards of an American university are the relations between its college and the secondary schools and between its professional and advanced work and its college. It must be emphasized at the outset that standards may be unreasonably high as well as unreasonably low. As Dr. Slosson has pointed out, " some one young man or woman is better worth educating than a thousand others, but until the psychologists have become successful enough to tell us in advance which this young man or woman is, it is best to throw out a reasonably wide net with a fine mesh." It must also be remembered that the problem is greatly complicated by what is generally recognized as the unfortunate fact that for the American student of normal ability about two precious years have already been wasted in the elementary school period.

The present Columbia standards for entrance may be broadly summarized as follows: Admission to the collegiate courses, Columbia College for men and Barnard College for women, is so administered as to permit the entrance of any worthy student who can show, by examination, the preparation of a good secondary school course or its equivalent. Once admitted, the quality of the work of a college student, quite as much as its quantity, is considered in advancing for graduation, and under the operation of the present rules many students graduate in three or three and a half years. Entrance upon professional study is based upon more than a secondary school training, but is not unduly delayed by demanding a four-year college course as a prerequisite. The capable student should be able to complete the requirements, both for the bachelor's degree and for any professional degree, in six years. Courses of higher instruction and research are supposed to be and in general are open only to those who have had a college degree or its equivalent, including special preparation for advanced work in the major subject.

Columbia has been one of the few American institutions to adhere to the plan of requiring entrance examinations for admission to college. Without going into a discussion as to the relative merits of the certificate and examination system, it may be pointed out that the more or less satisfactory working of the certificate system, in the Eastern colleges at any rate, may well be very largely due to the fact that certain important institutions still maintain the old examination method and that the classroom work in the school must provide for their training and testing as well as for that of the students who enter college by certificate. For nearly twenty years the University has been endeavoring to render the examination system as effective as possible. The first move towards uniformity of entrance tests was made under her leadership in 1896. Five years later Columbia was instrumental in the organization of the College Entrance Examination Board, which is a co-operative effort on the part of colleges and schools to prepare papers, conduct examinations, and grade the results in the best manner possible. The number of students using its examinations has grown from less than one thousand in 1901 to more than four thousand in 1913. A further fundamental step was taken in 1909 when the undergraduate admissions committees throughout the University were combined and an officer of professorial standing was appointed to take charge of the whole matter. Under his leadership the results of the entrance examinations are studied in the light of whatever else it is possible to find out about each candidate, through personal acquaintance and particularly through reports from his school teachers as to the details of his preparation, his general intelligence, maturity, and reliability.

The careful personal consideration of each case which it is possible for the chairman of the committee on admissions to give is cumulative in its effect from year to year, and is, it is believed, steadily building up an attitude of confidence on the part of schools and parents. As a result, the committee is obtaining a kind of information about candidates for admission which it would be extremely difficult to elicit by any type of formal examination.

Within the undergraduate colleges the last decade has witnessed not only a steady advance in the stated academic requirements, but, what is always more important, a greater thoroughness in their administration. As has not infrequently been the case in rapidly-growing institutions, the question of efficiency in teaching had not until recently received due attention, but at present this matter is receiving careful scrutiny. Five years ago the college examinations were centralized, and they are now managed more uniformly and efficiently than was possible under varying professorial standards. Side by side with this greater thoroughness has come also greater individual attention to and knowledge of each student, so that, although Columbia must admit to what the cynic has called a policy of justice tampered with mercy it is believed that the tampering is accomplishing good rather than harm. The *Columbia College Announcement* contains the following paragraph: " In the administration of the college regulations, it is the policy of the committee on instruction and of the dean to be guided in the treatment of individual cases largely upon the recommendation of the adviser, and by the general attitude of the student in question toward the College, *i.e.*, whether or not he has proved himself a creditable member of the college community, as shown by regularity in attendance, promptness in the fulfillment of his obligations, earnestness in his endeavor to profit by his college opportunities, both direct and indirect, and considerateness of others."

The second crucial point in the maintenance of academic standards is the question of admission to professional and advanced studies and particularly the relations between the college and the professional school. The incidental suggestion in President Butler's first annual report of 1902, that the degree of bachelor of arts might well be awarded after two years of college study, created so much alarm in the academic community and so much derision in the public press that for a time little attention was paid to his really important study of this double question of the length of the college course and the best preparation for professional study. What Dr. Butler had primarily at heart was the preservation of the American college, which he feared would disappear, as it has in Germany, between the upgrowing secondary schools and the downgrowing professional schools; he feared also that the professional schools would either rest upon too low a basis of preparatory training or be exalted to an artificially high position. In his judgment the earlier part of the pro-

South Court and the Library

fessional courses in law, medicine, engineering, and the like are most excellent material for the boy of nineteen or twenty. For him to postpone his professional course later than this is not only to waste his time, but to waste his mind, which is far worse. It was Leonardo da Vinci who said that just as food eaten without appetite is a tedious nourishment, so does study without zeal damage the memory by not assimilating what it absorbs.

The president felt that the combined course was not the best solution of the problem and that a uniform collegiate course of three years (which, by the way, was suggested as early as 1857 and apparently favored by Professors Anthon and Lieber) would prove to be only a temporary device. Personally, he saw no objection to granting the bachelor's degree after two years upon what was at least the equivalent of the accomplishment demanded for that degree in 1860. He made no effort, however, to impose his individual preferences upon his colleagues, whose opinions upon all the questions involved were obtained and carefully collated by Professor Munroe Smith. His admirable summary may be found in the *Columbia University Quarterly* for March, 1903, by any who care to look more fully into this whole matter. The proposal to award the bachelor's degree upon the completion of a two-year course was disapproved by ninety per cent. of the teaching force, and no change was made in the time requirements for the degree, this particular question being left to the individual student, who has solved it presumably to his individual satisfaction. Of the graduates of 1913 in Columbia College, eighteen students graduated in three years, twenty-one in more than three but less than four. A dozen took more than four years.

In the spring of 1904, the University Council recommended that the combined courses be not only retained, but should be developed so that, after the completion of a two-year collegiate program, the candidate for the first degree should be permitted to complete the requirements for that degree by work in any professional school except the School of Law, where the requirement was already three years.

This idea of telescoping the college into the university, as President Hadley has called it, was a distinctly Columbia product, and indeed was for many years known as the Columbia plan. We find the forerunner of the combined course in the splitting up of the senior year into three programs in 1857, although the experiment was tried for but three years at that time. It is due to Professor Burgess that the idea was kept to the fore during the eighties, and Mr. Low made it an essential part of his policy that the senior year of the college should be made the point of contact between the college and the university. So far as professional study goes, it was first used in connection with the School of Law in 1891. In 1896-97, eleven college seniors had elected professional options, as they are called, as follows: Law six, Engineering two, Architecture two, Medicine one. In 1912-13, seventy-eight students in Columbia College were pursuing professional options, as follows: Law forty, Medicine fifteen, Mines, Engineering, and Chemistry seven, Architecture five, Journalism four, Teachers College seven. The opportunities open to women to pursue combined collegiate and professional courses are developing slowly, and in Journalism at least seem to be upon a satisfactory basis. There is still much to be accomplished, however, in this direction.

The logical mind of Professor Munroe Smith saw that the student who spent two or three years in some other college and then came to Columbia for professional work would cover the same ground as the men in the combined course here, but would have no bachelor's degree to show for it. The suggestion was made that Columbia confer the degree after four years' combined residence, but great consternation was aroused thereby among the alumni of the College, who felt that its identity would be thus threatened. In some cases, fortunately they are growing in number, the college first attended has given its student a leave of absence to pursue professional studies at Columbia after three years of residence, and has graduated him with his class upon the certificate of Columbia that his professional work had been satisfactorily accomplished.

It is perhaps characteristic of Columbia's lack of binding uniformity that, in spite of the general acceptance of the principle of the combined course, three of the schools most recently taken into the University fold require no preliminary college residence of candidates for the professional degree—Pharmacy, Journalism, and Household and Industrial Arts. On the other hand, the Engineering School and the School of Education are planning, like the Graduate Faculty, to require a bachelor's degree or its equivalent as a basis for admission. Through the encouragement of collegiate preparation in the former cases and provision for college graduation in three years in the latter, the normal period of collegiate and professional or graduate residence remains, however, six years throughout the institution.

To understand the organization of the University one must first grasp the rather confusing fact that the name Columbia University is used in three different senses.

Technically it refers only to the original corporation, the direct descendant of King's College of the eighteenth century. Until 1912 the legal title was Columbia College. In another sense it includes also the independent corporations of Barnard College, Teachers College, and the New York College of Pharmacy, and in the broadest sense it includes also certain activities closely identified with its educational life, as for example the University Press, but not directly under the control of any one of the four boards of trustees.

The written law of the University is very brief, comprising less than forty pages of statute. Owing largely to the fact that so many of the parts enjoyed an independent existence before coming into the system, the actual machinery is pretty complex, and there are not a few theoretical inconsistencies—not a bad thing, by the way, for it has made possible local experiments, notably in the ingenious and resourceful Teachers College, which have later been successfully adopted throughout the institution. There is, nevertheless, an essential unity which can be grasped when one remembers that what may be called the pattern of organization is not single but triple, each part working from the trustees through the president, in one case into the several administrative offices, in another into the several divisions and departments of instruction, and in the third through the council to the faculties and administrative boards. Speaking broadly, constructive educational matters work upward along these ladders to the trustees, while financial control operates downward.

President Butler recently stated before the Royal Commission on University Education in London that perhaps the most important and characteristic contribution of the United States to education is the responsible part played by the trustees of its colleges and universities. It depends upon the particular board of trustees one has in mind and particularly upon whether they have grasped the fundamental principles behind government and administration, whether one agrees with President Butler or with those who are inclined rather to the belief, not infrequently expressed, that it is only when the trustees are idle figure-heads that they are not a source of danger to the institution. This question will be considered in greater detail in the concluding chapter.

At any rate, the fact that practically all the trustees live in the city of New York makes it possible for the different Columbia boards to hold more frequent meetings and in general to be in closer touch with the institution than is ordinarily the case. The initiation and careful preparation of reports and resolutions in the important standing committees before their consideration by the board at large is another characteristic feature. The most important of these committees concern themselves with finance, education, and the buildings and grounds. The provision that at least one member must retire each year keeps them from degenerating into " inner rings."

Columbia is fortunate in the fact that the trustees, while taking the initiative themselves in matters of finance and building construction, have by statute left the initiative in educational matters to the president and faculties. As elsewhere, their responsibility and authority are final and no educational policy can go into effect without their approval. As a matter of routine in minor affairs, this approval is indirect. The minutes of all faculties are laid before the board at the monthly meetings and, if no adverse action is taken, the recommendations of such faculties are regarded as having been approved. In important educational matters, however, the part of the trustees is the reverse of perfunctory. The amount of labor which the formulation of the annual budget alone lays upon the members of the committee on education will be shown in a later chapter, and in general it is, so far as I know, only in the case of the president and fellows of Harvard that the same degree of painstaking devotion is given to problems of university policy as they arise, and that there is such a close and effective co-operation with the academic staff in shaping the policies of the institution.

In their number, the twenty-four trustees represent a wide divergence in interest and point of view. One of the present board, for example, was elected four years after his graduation from college. Another was chosen fifty-eight years after he had graduated as valedictorian of the class of 1848.

The trustees of the original corporation are nearly all of them alumni, six of the number by recent agreement being nominated by the organized alumni as vacancies occur, each to serve for a period of six years. Other members are what are called traditional appointments—the Episcopal bishop of the diocese, the rector of Trinity Church, and one or two representative members of other denominations. The number of graduates upon the boards of Barnard and Teachers College is naturally much smaller, owing to the comparative youth of these corporations, but this does not seem to affect the devotion of the members nor the value of their services. In the same connection it may be observed that in the older board the traditional appointees, also less likely to be alumni, have always included some of its most influential members.

At Columbia, as elsewhere among American universities, the president is at the center of the whole complex scheme of things; he is like a telephone "central," binding together trustees, faculty, students, alumni, and the general public. At Columbia, the president is not the chairman of the board of trustees, nor is he *ex officio* a member. As specified in the statutes, his powers and duties are as follows:

> "The President shall have charge of the educational administration of the University, and shall be Chairman of the University Council, and of every Faculty established by the Trustees. His concurrence shall be necessary to every act of the Council or of a Faculty; unless, after his non-concurrence, the act or resolution shall be again passed by a vote of two-thirds of the entire body."

He is also charged with the duties of general oversight of the physical equipment of the institution, of calling and presiding over the meetings of the council and faculties, of making an annual report, of administering discipline or directing the deans to do so, of arranging for leaves of absence, and finally of conferring degrees when the requirements of the statutes have been fulfilled.

Actually his most important and most onerous task —characteristically not even mentioned in the statutes— is the preparation of a budget which controls the annual expenditures of the institution in all its myriad parts. Promotion would be an idle honor, if unaccompanied by a change in the budget, and perhaps mainly for this reason budget preparation entails not only the most careful personal consideration and labor in minute details, and later protracted sittings with trustees' committees, but countless conferences with individual members of the University. All this must, under the present system, be done by a man who has to attend each year more than two hundred stated meetings of boards, faculties, and committees, to know what is happening educationally not only here but elsewhere, to inspire people to give money, to make numberless speeches, and otherwise submit to the duties and impositions of representing the University before the public.

President Butler once described the duties of his position by comparing it, in terms of English political life, to a prime minister holding two portfolios: "He is prime minister in that he is ultimately responsible for the policies of the administration, the consultant, the adviser, and the friend of every person charged with an academic duty. He holds the portfolio of foreign affairs in that it is his function to look personally after the external relations of the University, its relations to the surrounding public, to other universities, and to the affairs of the country at large. He holds the portfolio of chancellor of the exchequer in that, if more expenditure is demanded than the stated income will provide, he has to find the additional income needed. And up to date he has not been constitutionally empowered to levy a tax collectable by ordinary legal methods!" He went on to say that the president lived almost exclusively in the future. With the work of the current year he has no contact and but little concern, save with specific problems which are brought to him for consultation or advice. He hears nothing of the current work until he reads the records or the newspapers, and, if he trusts the latter, he hears little that is true of what is going on.

As to whether the position of the American university president among his colleagues of the teaching staff is that of *primus inter pares* or that of an irresponsible and dangerous despot depends, like the verdict upon the trustees, upon one's point of view. At Columbia, at any rate, the former point of view seems to be distinctly in the ascendency. Here, as at other universities, the president is shamefully overloaded, and it becomes increasingly harder for him to keep his attention where it should be, in planning for the future. Whether this overloading is a necessary incident of the stage of university development in which we find ourselves, or is merely because no one has hit upon the right way to relieve him, I am not competent to say. Certainly the public at large needs some education in this matter. A man who would not go to the president of the New York Central Railway to buy a ticket to Yonkers will insist upon burdening the president of one of our great universities about some affair no less trivial.

Half a century ago, President King examined the boys for entrance, taught classes, and kept the college minutes and records of lateness. He brought cases of discipline before the trustees, who occupied most of their time over them. It was Barnard's habit, as various agenda occurred to him, to jot them down on a slate. After his death this slate was found in his desk and the memoranda upon it showed pathetically, but none the less vividly, the trivial details which in his time were occupying the attention of the president. When one compares these conditions with the present, it is evident that, although Columbia still overloads her presidents, she has gone a good way along the path of devolution of authority.

Appointed by the trustees are ten deans and directors, who, so far as they themselves desire, are relieved from teaching duties. Between 1890 and 1905 the initiative as to these appointments came from the faculty concerned; since then it has come from the president, who, however, consults the members of the faculty before making his recommendation to the trustees. Deans are no longer the venerable personages which the title ordinarily connotes. Of the five last chosen, the average age at appointment was forty years. They serve in a triple representative capacity: to the central administration, to teachers with divergent views upon education, and to the students with their time-consuming needs and interests. In the case of the separate corporation, the deans have a further direct responsibility to the trustees of that corporation, and the deans of other faculties often meet the trustees' committee on education to present and discuss reports from the departments included in their respective faculties. The rôle is not an easy one to play, but at any rate they are all doing their best and it is their hope that they lighten in some measure the pressure which would otherwise fall upon the president.

An experiment in relieving the latter of some of the tasks which cannot be classified as falling within any particular school has recently been made in the appointment of Professor W. H. Carpenter as Provost. While it is too early to judge the result, there can be no doubt as to the number and importance of these problems. There is also a provost of Barnard College whose duty is to maintain and develop the university relations of the College, while the dean is to carry on the internal administration and to represent Barnard as an independent organization. At Teachers College, the largest single element in the University, the dean is assisted by a controller and by two directors, of household and industrial arts.

Less directly connected with teaching and research, but performing indirect educational services which it is difficult for an outsider to appreciate, are the great administrative offices. Columbia is fortunate in having at her service, besides the officers already mentioned, thirty-four men and women, fifteen of them college graduates, whose work is fully or primarily administrative, and whose duty is to carry out the daily tasks which formerly took up most of the time of the president and trustees, as a perusal of the early minutes will convincingly show, and which to-day throughout the country are too often in the hands of more or less efficient faculty committees.

The lead in establishing these junior administrative positions, which was taken at Harvard and Columbia at about the same time, has now been followed by all the progressive institutions of the United States, and there are even signs that the example is being felt in England and Germany. These men and women are really constituting a new profession of great public usefulness. The businesslike administration of their offices, particularly those of the secretary, the registrar, and the officer in charge of buildings and grounds, carries a great load of routine detail and leaves the teachers free to do their teaching, and the deans and advisers to establish an acquaintance with each student based on personal knowledge rather than printed forms.

Work of this kind needs a clear, analytical mind, because the fulfillment of its purpose depends upon the ability to know, without being told, what is one's business and what is not; and particularly to distinguish between a real precedent and a pseudo-precedent. With the professor's particular business, these administrative officers should have nothing to do: that is, with the formulation of constructive educational policy, with the organization and carrying on of effective teaching, with the pursuit and direction of research and scholarly publication. The administrative officer must take heed lest he irritate the professor or actually hamper him seriously in his work; nothing is easier than for an ingeniously minded youth in an executive position to spin out schemes for reports and statistics that involve unnecessary and intolerable burdens upon his academic elders and betters. If, however, he keeps clear of these pitfalls, he can have the comforting assurance that he is doing his share, and it is no small share, in the great work of the institution.

Most closely allied with the president's own office is that of the secretary, whose stated duties are few, but whose actual tasks are legion. For example, more than thirteen thousand persons each year make inquiry as to entering the University. Their immediate requirements are satisfied. Their names and desires are then recorded in order that future material that might interest them can be sent without further request on their part. This classified card index of correspondence furnishes an invaluable basis for plans to meet the needs of the future. Besides carrying on the general correspondence and supervising the university printing and distribution (this means many thousand more letters and fifty thousand dollars' worth of printing), keeping all the academic records and looking after the details of public functions, the secretary's office is a sort of ante-room to the president's, and serves, finally, as an experiment station for many a new and tentative development.

Fifty years ago the total provision for janitorial service was one thousand dollars per year, but at present our largest administrative office is that of grounds and buildings with a staff of more than three hundred. At its head is the university controller, who is responsible not only for the routine care of the plant, but for the planning and construction of new buildings. In a single recent year no fewer than six new buildings, with a floor area more than one and one-half times that of the entire Forty-ninth Street equipment, and representing an expenditure of over two millions, were on the stocks. The operations of the department are upon so large a scale that it is possible to apply to advantage the principles of modern scientific management. For example, the devising of a simple but effective method of testing coal resulted in a striking annual saving. In addition to the oversight of new construction and the general maintenance of the plant, the controller and his assistants, the superintendent and assistant superintendent of buildings and grounds, are responsible for the residence halls of the corporation and of the University commons. Human nature being what it is, these furnish particularly nerve-racking problems. I am sure they often wish that it were now possible, as it was in DeWitt Clinton's day, to furnish board and lodging to the students for a dollar and a half per week.

The registrar's office keeps accurately and availably the hundreds of thousands of records upon which depend the admission, advancement, and graduation of an army of more than eleven thousand students of all sorts and conditions, whose status is complicated by seven or eight hundred cases of cross-registration annually. His task has practically doubled within the past five years, owing in part to growth in numbers, and in part to the greater personal attention given to each student. Before the office was upon a satisfactory basis, the right hand of the institution did not know what its left was doing; students received scholarships simultaneously in different schools and others discreetly tucked themselves into corners and pursued curricula devoted exclusively to fraternity membership or football.

The bursar, who by the way is technically responsible to the treasurer and not to the president, has the almost equally difficult task of administering the complex regulations as to fees. He also maintains a students' bank and distributes the welcome treasurer's checks at the end of each month to the faculty.

A most useful man to the students is the employment secretary, whose records, since the work was given adequate financial support in 1902, show student earnings of considerably more than a million dollars, obtained largely through the direct aid of his office. About one-third of this sum was earned through summer work of various kinds. With the exception of Teachers College, the even more important work of providing permanent positions for graduates and seeing that good men and women are advanced from one position to another, is not given the attention that it should receive, and one of our greatest needs is more money for this work.

The work of the chaplain and of the library and admissions office are described elsewhere, and limitations of space prevent more than the mention here of the purchasing agent, the controller of student organizations, the health officer, the newspaper representative, and of officers who, though technically not under University control, are really part of its administrative fabric: as, for example, the secretary of Earl Hall, the athletic manager, the alumni secretary, those in charge of the University Press, and the Faculty Club—in sooth, a goodly company!

He who looks for them can find plenty of inconsistencies in the administrative system. From the time that Mr. Low took up the task of establishing some kind of organization for the completely disorganized institution, there have been periodic swingings of the pendulum toward greater centralization and then away from it. In particular, the routine administrative work of the allied corporations is now conducted rather in general harmony with the central offices than under their direct control. In not a few cases, changes and exceptions result from questions of personality rather than of principle. In general, however, the essential point is well looked after, and that is that there should be competent persons at the points of contact in our complex machinery; for it is at these points that friction otherwise develops and loss of power ensues.

III

WAYS AND MEANS

Johnson's Announcement. Financial Assets. Sources of Wealth. Gifts and their Significance. Expenditures. Problems for Trustees: Space, Salaries, Earning Capacity, Deficit and Debt. Sites, past and present. The Central Group. Other Buildings. The Libraries. University Bibliography. Laboratories and Collections.

The purpose of Columbia University may still be accurately described in the quaint phraseology of President Johnson's announcement of King's College in 1754:

"A serious, virtuous, and industrious Course of Life being first provided for, it is further the Design of this College to instruct and perfect the Youth in the Learned Languages, and in the Arts of Reasoning exactly, of Writing correctly, and Speaking eloquently: And in the Arts of Numbering and Measuring, of Surveying and Navigation, of Geography and History, of Husbandry, Commerce, and Government; and in the Knowledge of all Nature in the Heavens above us, and in the Air, Water, and Earth around us, and the various kinds of Meteors, Stones, Mines, and Minerals, Plants and Animals, and of every Thing useful for the Comfort, the Convenience, and Elegance of Life, in the chief Manufactures relating to any of these things; and finally, to lead them from the Study of Nature, to the Knowledge of themselves, and of the God of Nature and their duty to Him, themselves and one another; and everything that can contribute to their true Happiness both here and hereafter."

I have tried to describe in baldest outline the constitutional machinery of the institution for carrying out this purpose—"consolidated and yet flexible, centralized as regards legislation, decentralized as regards administration, living not only at the center but at every part.'' It may now be well to consider briefly (1) what are the sinews of war and how obtained, and (2) what is the present material equipment, before outlining the work of the different schools, summarizing the work of an academic year, and finally devoting the remainder of the book to what after all makes the real university, its human cargo.

The present financial assets of the four corporations, including the assessed valuation upon the land and buildings used for educational purposes, is more than $54,000,000. At Mr. Low's inauguration it was $9,000,000. At Dr. Butler's it was $26,000,000. In round figures, the present assets of the four corporations are as follows:

	Columbia University	Barnard College	Teachers College	Pharmacy
Property owned and used............	$17,000,000	$3,000,000	$2,500,000	$350,000
Net investments....	31,000,000	1,300,000	2,300,000	
Less debts..........	3,500,000		600,000	70,000

An analysis of the sources of the present wealth of the University can be made only roughly because the original source of certain assets has been complicated by the sale of real estate, by building operations, and the like. The funds of King's College (based, it may be said in passing, mainly upon public lotteries and State grants from excise) were swallowed up in the Revolution. The $40,000 given by the State Legislature to Columbia College at the end of the last century went into buildings. There remain three great sources: The original gift of land from Trinity Church in 1754, to which a small addition was made by the city now yielding about $127,000 each year. Then came the grounds of the old Hosack Botanical Gardens, west of Fifth Avenue between Forty-seventh and Fifty-first streets, which were the gift of the State in 1814, a property which at the time, although valued at $75,000, it would have been hard to sell for $7,000. Its original area has been reduced by sales to about two-thirds of its former size; what remains yields annually about $578,500. The third source is individual gifts and bequests, amounting to nearly $26,000,000, of which only about $200,000 was received before 1890. Indeed, in more than one year of Mr. Low's administration the gifts greatly exceeded in value all those received prior to his inauguration. When one considers the totals of the decade just closed, it is interesting to remember the general consternation and amusement when President Butler's first report called for $10,000,000. On a single day, March 6, 1911, the trustees accepted gifts and bequests of $1,800,000.

A list of the gifts of $50,000 or more, with the purposes to which they have been put, will be found in the Appendix. Of those received by the central corporation since Mr. Low's inauguration, over $6,600,000 have been for land and buildings, $8,100,000 for endowments and establishment of special funds, and about $570,000 for miscellaneous purposes.

It may be of interest to analyze these gifts in other ways. For example, $6,600,000 came from or on behalf of members of the institution (alumni or trustees), and about $8,600,000 from persons having no such connection at the time the gift was made. Classified in another way, $6,100,000 was based upon the general interest of the donors in the work of the institution as a whole, and $9,100,000 was based upon their particular interest in some special field of its activity. The bequest of John Stewart Kennedy is an excellent example of the former type, and that of Joseph Pulitzer of the latter.

The common interest of different members of one family, usually in some particular field, is a significant factor in the recent increase in Columbia's resources. To W. K. Vanderbilt, his children, and his son-in-law, W. D. Sloane, the University owes practically all its physical equipment for the study of medicine and the endowment of its clinic and hospital. Similarly the family names of Avery, Dodge, Hartley, Havemeyer, Milbank, Schermerhorn, Stokes, and others may well be held in grateful remembrance.

If when thirty years ago the trustees gave their consent to some slight provision for the higher education of females, as they called them, they could have foreseen in how large part Columbia's future resources were to be received at the generous hands of women, they might, I think, have been less reluctant and half-hearted about the matter. The gifts from women have not only been conspicuously large, but have been as a rule both timely and intelligent.

Another classification will bring about the close relation between the institution and the city of New York, a point which I tried to emphasize in the introductory chapter. Of these gifts there have come from New Yorkers, whose general responsibility to the city has been also shown by their gifts to other representative activities, the sum of $8,300,000. The remainder, so far as I know, has come from those who have not been identified with other public activities of the city. An interesting and valuable element among these gifts has been the provision by general subscription for an academic memorial, usually a fellowship, to some conspicuously useful citizen of New York—George William Curtis, Joseph Mosenthal, Anton Seidl, Colonel Waring, Carl Schurz, or Richard Watson Gilder.

The value of gifts depends perhaps only secondarily upon their amount. The element of timeliness is of great importance: Barnard College, for example, came into being when fifty people promised to give one hundred dollars annually for four years. Another factor is freedom in the use of the gift. President Butler in a recent report has said:

> "What the University most needs is gifts that will aid it in doing better the work which it has already undertaken, and not gifts which compel it to assume new obligations that in turn make an additional drain upon its already overtaxed resources. Many of those who make gifts to a university really put upon the university the new obligation of acting, without compensation, as their own trustees or executors for the purpose of carrying out some plan or purpose of their own. An examination of the gifts made to American universities during a period of years would probably indicate that many persons of means desire to use a university for some purpose of their own rather than to help it carry on the work for which it is established. Gifts for general endowment, for needed buildings or equipment, or for the support of work already in progress and insufficiently sustained, really help a university to serve the purpose for which it exists. Gifts for new and designated purposes may or may not help a university. If these designated purposes are closely allied with work already in progress, or if they are purposes which the university is anxious and ready to accomplish, then gifts to carry them on are helpful. If, on the other hand, the designated purpose is one which the university would prefer not to undertake, or one which it cannot undertake without adding something to the amount proposed as a gift, then the gift, instead of being helpful, is a source of embarrassment. Nevertheless, whenever

such a gift is offered it must be accepted, unless the trustees are to run the risk of grave misunderstanding and criticism."

No more valuable gift has come than that of an anonymous donor, who for more than a decade gave $30,000 annually for current expenses, absolutely without restriction. This made provision for a fund irreverently but affectionately known about the University as the " yellow dog " fund, which solved many a trying problem arising between budgets.

Many of the most valuable gifts have not been of money at all, but have consisted of works of art, usually class memorials. Most important of all are the many examples of devoted service on the part of officers and trustees. Sometimes this type of gift takes the shape of a permanent memorial, like the herbarium of Professor Torrey or the chemical museum of Professor Chandler, but more often it is bound up in the fiber of the University itself, and its memory lies in the grateful hearts of colleagues and students.

Entire responsibility and authority for the expenditure of money rests with the trustees of the several corporations. They take this responsibility in the approval of the annual budget. At present no faculty as such has any statutory power to make suggestions as to finances. Departments can recommend only in relation to themselves and their members, and this they do with great enthusiasm and vigor. The requests for desirable increases following the announcement of Mr. Kennedy's princely bequest would have consumed the income from a sum four times as large.

In the University Corporation, taking the figures for

1912-13, the annual income is spent proportionately as follows:

For overhead charges, "educational administration"	$ 151,775.00
For teachers' salaries, departmental appropriations, etc. (including $318,900 received from Barnard and Teachers colleges)	1,673,988.00
For care of buildings and grounds	321,538.00
For library	106,461.50
For business administration	50,200.00
For annuities	36,580.00
For interest	115,945.00
For redemption fund	100,000.00
For miscellaneous expenses, including retiring and disability allowances, fellowships, prizes, etc.	143,646.11
Total	$2,700,133.61

To meet these charges, tuition and other student fees bring in a total of a little more than a million and a half, and rents, mortgages, and dividends about a million and a quarter. A table giving a summary of the most recent financial report of the entire institution will be found in the Appendix.

A century ago the total income of the institution was about $7,500. The College owned, in addition to the site and fifty city lots adjacent, some land near Lake George, which was later sold for about $11,000. In 1814 came the gift from the State of the Hosack Botanical Gardens, but not until 1842 did the real estate of the College begin to produce any appreciable income. That year the revenue was $22,855. In the year following came the first considerable private bequest since the Revolutionary War—$20,000 from Frederick Gebhard to found a professorship. Then followed another barren period until 1881, when Stephen Whitney Phœnix became the first of the great alumni benefactors, leaving to the College his valuable collection of books and, subject to certain life interests, his entire fortune of about half a million dollars. This and President Barnard's own estate of about $90,000 were the only important additions until in 1891 the merger with the Medical School added the Vanderbilt family to the benefactors of the University. For purposes of comparison, it should be remembered that in the twenty years prior to 1890 Harvard University had received $5,000,000 in money and $2,500,000 in buildings and lands.

At the height of Barnard's influence, in 1884-85, the total income was short of $350,000. In the year following Mr. Low's inauguration the receipts from rents were $380,000, from students' fees about $250,000, and less than $50,000 from interest on trust funds. About $30,000 came from annual gifts for specific purposes.

It must be remembered that the responsibility of the trustees is only secondarily for the expenses of a given year. Their eyes must always be on the future and in their plans for the future they must always keep before them the existence of certain problems which are difficult enough to cope with singly, but which are infinitely more so in the interwoven fashion in which they present themselves.

No institution in the world, I suppose, has had to struggle harder than Columbia with the problem of space. Crowded from her home by the growing city for a second time, she established herself at Morningside at a cost of nearly $7,000,000, thereby almost doubling the price of land there, and was shortly compelled by her own rapid growth to add to her holdings beyond the original purchases at an additional expense for land of $4,000,000. The main addition was the purchase of the South Field. This was made possible by the loyal interest of a group of alumni and other citizens, who, when the public sale of the property was threatened in 1902, purchased the land themselves and held it until the University, through the sale of certain other property, was enabled to take it over. It was similar thoughtful and generous conduct on the part of certain friends of Teachers College that permitted the construction of the dormitory building known as Whittier Hall, to the east of the original Teachers College site, and its final turning over to the College in 1908.

The wisdom of the University Corporation in adopting the expensive type of building entailed by the approval in 1893 of the general scheme of Messrs. McKim, Mead, and White has been sometimes questioned. There is no doubt that it has meant a large initial outlay, larger than was first contemplated, owing to the great increase in the cost of construction. Apart from the intangible but none the less real asset of a stately and dignified architectural scheme, however, two definite benefits have become manifest. The absence of a well-ordered plan or indeed the adoption of a plan of some other type would have seriously limited the number of buildings which could appropriately be erected upon the restricted area of the site, a limitation which would have caused serious trouble before this; and, furthermore, the lower cost of maintenance of these well-constructed buildings represents an annual saving of the interest upon a very considerable capital. The maintenance charges upon the Columbia buildings is proportionately to their cost the lowest in the United States.

A second perennial problem is that of academic salaries. It is, to be sure, often possible to pay men in technical branches with the prestige that comes from a title. There is a story at the Medical School about an instructor who said he could hardly afford promotion to a professorship because the salary was so much lower than that of the obscurer position which he then held. There are also some few men rich in their own right or in that of their wives who will do first-class work regardless of salary. In general, however, the University gets what it pays for, and what proportion of its total income it should pay, and to whom, is a source of never-ending worry. The greatly increased cost of living, particularly in the great cities, the increased resources and consequent tempting power of the State universities, with the resulting ethical problem as to holding some particular man at the expense of his fellows, the possibilities of indirect help to the staff through faculty homes, the question of disability allowances and pensions, greatly relieved but not wholly solved by the Carnegie Foundation, the pressure from increasing numbers or departmental ambition to create new positions—all these and many others are factors in this complex problem.

Then there is the problem of earning capacity. The original King's College charges were twenty-five shillings per quarter, reinforced by a parent's bond against damages to property, by mulct not to exceed fourpence for each case of negligence in study, and finally by a pistole to the president upon graduation. The present fees are, needless to say, considerably higher. They are administered in a businesslike way, in general upon an *à la carte* basis rather than *table d'hôte*. That is to say, the student pays for the courses he actually takes. The cost of instruction, however, has increased still faster than the rate and efficiency of the fee collection, and, as a matter of fact, it has at no time been possible to add to the capital of the institution by surplus from the fees of students. President Barnard continually pointed out to the trustees the peculiar responsibility of Columbia to take that position of leadership to which her endowment, with fees as only a secondary source of income, entitled her. The present proportion of total annual expense met by earnings varies from eighty-two per cent. in Teachers College, where this high figure presents a problem to which the dean has repeatedly called attention, down to twenty-nine per cent. at the College of Physicians and Surgeons.

There is always present the question of maintaining departments which are of great importance in the field of scholarship, but which attract very few students, and the problem of facing certain and serious loss of fees through an advance in educational standards, as was done in medicine ten years ago and is about to be done in engineering.

Since, in any event, the student pays only a part of the actual cost of tuition, the distinction between fee-paying students and scholarship students is only one of degree. The problem of providing for the really deserving student regardless of his ability to pay fees has been fairly well solved in recent years by loan funds and fellowships, and particularly since a logical system of tuition scholarships, with tenure depending on high standing, has replaced the old haphazard system of exemption. Such scholarships are available for one out of every ten students.

The question of the limitation of the student body, which already faces Teachers College and which will face all the other parts of the University, one after another, involves not only the educational question of individual attention to each student, but the limitations of space, and finally the financial fact that, although within certain limits students' fees are assets, at other points every individual student involves an additional expense.

Bound up in all of these is the final problem of deficit and debt. After their bitter struggle, lasting for more than half a century with both these ogres, the struggle being made the harder through the constant temptation, bravely resisted, to pay for the present from the future by the sale of real estate, the trustees breathed a sigh of relief when, in 1872, they found the institution free and clear. President Barnard endeavored to prepare their minds for a return to bondage by reminding them that " debt is no doubt a great evil, but there are evils worse than this, and among these is stagnation." It was not, however, until the purchase and development of the Morningside property was undertaken that a debt was incurred: $1,000,000 to meet one-half the purchase price, $1,300,000 for buildings, $600,000 for grading and paving, and $85,000 for interest on the debts already incurred. The remaining expenses were met by the sale of the Forty-ninth Street site and other real estate at about $1,200,000 and from gifts and bequests of about $4,000,000.

The original proposal to use temporarily the old buildings on the site would have involved a total expense of but $2,700,000 and slight indebtedness, if any, but, as events have proved, the more ambitious plan later adopted was the wiser. For many long years this debt, although the trustees succeeded in funding it temporarily at three per cent., proved a grievous burden. The merger of the Medical School in 1891, although it increased the nominal assets of the University by more than a million and a half dollars, added tremendously to its expenses. Although fortunate educationally, it proved embarrassing financially that the old inexpensive and ineffective system of medical instruction by didactic lectures broke down at about this time and had to be replaced by the infinitely more expensive type of instruction by laboratory and clinic.

In spite of a special guarantee fund, generously provided by Mr. Low and others, nearly $850,000 had to be advanced between 1894 and 1906 from the endowment of the University, or borrowed, to meet the annual deficiencies incurred for interest and for educational developments. In 1902 came the opportunity to buy the urgently needed South Field—two city blocks to the south of the original purchase—at a cost of about two and a quarter million dollars, and the trustees decided that the time had come to sell a part of their Upper Estate (the old Botanical Garden), which, with the exception of sixteen lots sold early in Barnard's administration to provide for the School of Mines, their predecessors had with providential wisdom and courage held for nearly a century. The sale of lots, which went on from 1903 to 1906, netted more than three and one-half million dollars, and from the prices realized the trustees felt justified in increasing the ground rent upon the remainder of the property as the leases expired, so that the net income from the reduced holdings ultimately exceeded that from the original property. This caused a protest from the dwellers on the property, our own alumni, and others, many of whom had built handsome houses on their leaseholds, and involved the University in tedious litigation, from which it finally emerged victorious in 1911. After all, the first responsibility of the trustees was not to the tenants, but to the educational needs of the institution, and, as a shrewd financier had said some years before when asked for a contribution, " You can't expect outsiders to help you until you administer your own real estate in a businesslike way." In 1909, the University made an arrangement for the refunding and gradual retirement of its remaining debt of about $3,000,000 in annual installments of $100,000, payable from the income in rents from the Upper Estate.

For the first time in fifteen years the budget of the corporation showed a surplus for 1908-09, but with calls on all hands for increased expenditure the deficit returned three years later and the University is again *in extrema spe salutis,* and, while the institution continues to be progressive, such, doubtless, is bound to be its normal condition.

The trustees are most anxious that unnecessary expenditures shall not cause the deficits to mount up unduly. Last year they asked for definite recommendations from schools and departments as to ways and means to reduce our expenditures. As would probably be the case at any other institution of learning, the result was a series of interesting suggestions as to fields in which large additional funds could profitably be spent, with here and there a proposal for some saving trivial in amount. After all, a university is not a business venture, nor are professors business men. A certain amount of waste seems to be inevitable, and the trustees must see to it that the amount is kept as low as possible.

From its first habitat in the vestry of Trinity Church, King's College soon moved to a beautiful site of three acres on Murray Street, where the College remained for nearly a century before it was forced northward by the growth of the city to what was expected to be a very temporary abiding place at Forty-ninth Street, but which was destined to be its home for forty years. There was, to be sure, constant talk of moving. As early as 1817 an amalgamation with Washington College, then on Staten Island, was considered and, later, a scheme to build on the Botanical Garden property from plans to be drawn by Richard Upjohn. From 1866 on, the trustees' minutes contain constant reference to plans for removal. In 1872, the alumni favored taking the undergraduate work out of the city and locating it in the country, and later in the same year property was purchased for the purpose somewhat farther uptown than the present site. Expensive buildings were erected upon the Madison Avenue property, however, and Mr. Low's election found Columbia still there, greatly overcrowded and overflowing across Forty-ninth Street into private houses. He recognized the impossibility of continuing under existing conditions and pointed out that the College had three choices: to move the entire institution to the country, to separate it up among different sites either in the city or outside, or finally to find a suitable single site for all parts on Manhattan Island. The adoption of the third possibility was hastened by the discovery and suggestion of a suitable piece of land by Mr. John B. Pine, of the board of trustees, in 1891. This site was on high ground, overlooking both the Hudson and the Sound, running north from One Hundred and Sixteenth Street, between Amsterdam Avenue and Broadway, and containing sixteen acres. The property was owned by the New York Hospital and occupied at the time by the Bloomingdale Asylum for the Insane. It had been the scene of patriotic defenses in the War of 1812 and of an actual battle fought by Washington in the early days of the Revolution. Indeed, there is a tradition that an ancient pine, which stood until 1906, had been held in peculiar veneration by the Indians of Manhattan Island.

The decision to move to Morningside Heights—the name, by the way, is now never heard except in certain college songs—was at first greeted with considerable alarm, for the region was about as remote and inaccessible as Mt. Kisco is to-day. Indeed, there are those still living in the neighborhood who remember when it was usual to stay overnight when one went down to the City. With the exception of a few, however, who indeed are still unreconciled, the importance and wisdom of the decision was soon generally recognized. The project excited great popular interest and, most important, Teachers College and Barnard College were inspired to buy land adjacent. Indeed, one of the great gifts to Barnard was made on condition that the building for which it provided should be located within a thousand feet of the University.

The new site was not to come into the possession of the University until October, 1894, and the period between purchase and possession was wisely employed not only in raising the necessary funds, but by giving careful consideration to an architectural scheme. The lack of such careful planning, not only for the present but for the future, is only too evident in the appearance of most American institutions of learning. The ultimate decision lay between a Gothic scheme recommended by Charles C. Haight of the class of 1861, the designer of two beautiful buildings at Forty-ninth Street—now, alas, destroyed—and a Renaissance scheme recommended by Charles F. McKim and his partners. The plans of the latter were adopted and Mr. McKim's devoted share, until his death in 1909, toward making the University what it is to-day is recorded in the inscription placed in his honor in South Court: *De super artificis spectant monumenta per annos.*

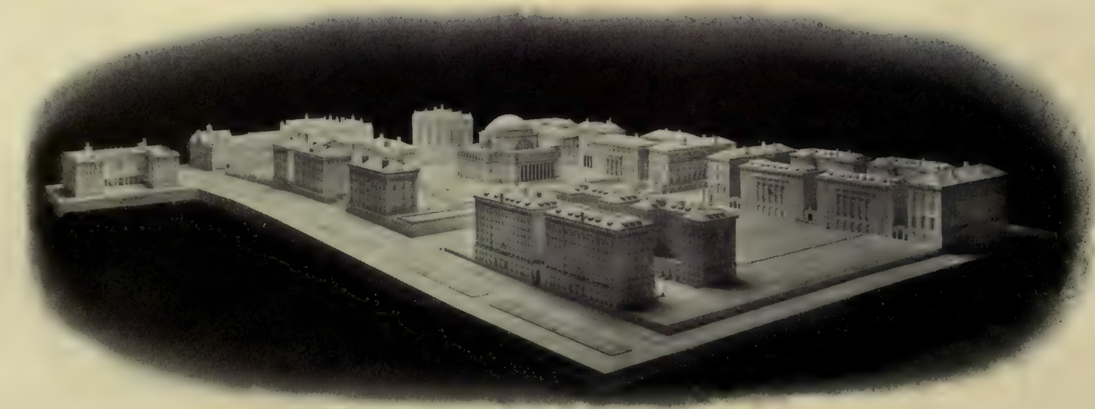
The first cornerstone to be laid was that of the Library in 1895. A year and a half later, the site itself was formally dedicated in the presence of five thousand people. President Low said on this occasion:

> " We are met to-day to dedicate to a new use this historic ground. Already it is twice consecrated. In the Revolutionary War this soil drank the blood of patriots, willingly shed for the independence of the land. Since then for three generations it has witnessed the union of science and of brotherly kindness, devoted to the care of humanity, suffering from the most mysterious of all the ills that flesh is heir to; to-day we dedicate it in the same spirit of loyalty to the country, and of devotion to mankind, to the inspiring use of a venerable and historic University."

The other component parts of the present University have had many homes. The Law School has had four, the Medical School six, the College of Pharmacy eight; Barnard was born and spent her babyhood in a rented house on Madison Avenue, and Teachers College hails from University Place.

After the complicated and tedious processes of removal, the University was finally opened in the new home on October 14, 1897. Of the present eighteen buildings of the corporation, but six had been erected and two of the asylum buildings were also used for academic purposes.

I was a senior at the time and well remember our mixed emotions, into which entered a sense of grandeur and confusion, of the smell of plaster and muddy footpaths, of magnificent but inconvenient distances between



Model of the University Buildings

classrooms, and memories of the crowded but convenient and familiar home we had left. We found the situation as remote as did our academic predecessors in 1857, when they moved to a new home that " lay between the Potter's Field and the Bull Pen." The previous occupancy of the land as an asylum recalled the old joke about Columbia being the home of the deaf, dumb, and blind (in 1857 the Forty-ninth Street property had been occupied by an institution for deaf mutes and by a sash and blind factory). The Grant Monument, recently dedicated, was until then the only attraction to induce the world to make the inconvenient trip up to these remote regions. The University was followed, however, by the Cathedral of St. John the Divine, the Union Theological Seminary and other public institutions, including schools of music and art. Churches have sprung up and apartment houses by the hundred. The subway and electric cars and omnibuses have almost succeeded in making it " downtown." The district still retains an atmosphere of its own, however, figuratively and literally. No one coming up from lower New York can fail to be impressed by the difference in the quality of the air as he leaves the Subway at One Hundred and Sixteenth Street.

In the words of a visiting French journalist, Columbia has not alone its lecture halls and laboratories, but its churches, libraries, physicians, gardens, post-office, telegraph stations, barber shops, dining and living halls, service buildings. " It is not a university," he exclaimed to the readers of the *Matin,* " it is a city!" Speaking statistically, the University Corporation occupies at One Hundred and Sixteenth Street twenty-six and a quarter acres, at Fifty-ninth Street a little more than two. The Barnard property is just about four acres, and that of Teachers College three and a half, plus fifteen acres at Van Cortlandt Park and two city lots at the Speyer School site in Manhattanville. The College of Pharmacy occupies three lots at Sixty-eighth Street. Outside of the city there are 583 acres at Camp Columbia, for engineering students, at Morris, Conn., and 426 acres at the farm at Fishkill, N. Y.

The total number of academic buildings—so far as one can separate them, for particularly at the Medical School and Teachers College they run into one another in a confusing way—is forty-five.

The University buildings are of a classic style, embodying, however, the principles of the early masters of the Renaissance. The central feature of the architectural scheme is, of course, the magnificent Library, 200 x 200 feet and 134 feet high. Its base line is just 150 feet above the Hudson. This building of gray limestone, with its commanding dome and noble portico, was recently included in a contest of architects among the five most beautiful buildings in America, the only buildings receiving more votes being the National Capitol, the Public Library and Trinity Church of Boston, and the Congressional Library. A striking note of unity is achieved through the fact that the other buildings of the group have all the same base line as the Library, and the same cornice line sixty-nine feet above. The bases of the other buildings are of light granite, with upper stories of Indiana limestone and brick of rich and varying shades. The entrance to all the buildings is from the campus, not from the street.

The main axis of the group runs north from the Library through the still incomplete and unsightly University Hall, which contains the gymnasium, the commons, and the central heating and lighting plant, on into the Green. To the south, it runs through the spacious South Court (which provides a fitting approach to the Library), across One Hundred and Sixteenth Street and the athletic field and tennis courts of South Field. At right angles to this axis are three supplementary axes defined by buildings running east and west. The beautiful St. Paul's Chapel, recalling the early Renaissance churches in Northern Italy, and Earl Hall, the students' building, flank the Library. To the north, Schermerhorn, for natural science, and Havemeyer, for chemistry, each 200 feet by 80, flank University Hall. Upon a lower level, and between this line of buildings and Teachers College, across One Hundred and Twentieth Street, is the University Green of about three acres. To the south of the Library, the One Hundred and Sixteenth Street axis is defined by beautiful buildings, each about 200 feet by 53, upon three of the corners—Hamilton for the College, Kent for law and political science, and Journalism.

The whole scheme is bound together by an outer line of intervening buildings, which run north and south upon the avenues. North of One Hundred and Sixteenth Street are four academic buildings, each about 150 feet by 60: Engineering and Mines on the Broadway side and on Amsterdam Avenue Fayerweather, for physics, and Philosophy, which also houses the advanced work in letters. The lines are carried southward by three dormitory buildings, each 137 feet by 60, Hartley and Livingston on Amsterdam, and Furnald on Broadway. Inner buildings, facing north and south, are included in the architectural scheme, and one, for the Avery library and architecture, has been erected, completing, with Schermerhorn, Fayerweather, and the Chapel, the first of the four smaller quadrangles for which the plans ultimately call. Underground, all the buildings are connected by a system of tunnels, through which water, heated air, gas, and electricity are distributed.

Across Amsterdam Avenue lies the recently purchased East Field, on which the only buildings thus far erected are the cancer research laboratories and the handsome President's House. This latter was included in the original plans, but had to wait nearly twenty years for erection. Now that the growth of the city has blotted out the outlook upon the Hudson to the west, one of our valued academic possessions is the fine view from the President's House over Morningside Park, across the city, and to the hills of Long Island.

In comparing the architecture of Columbia with that of any one of the rural institutions which pays intelligent attention to its architecture, say Princeton, one is struck with the compactness of the former scheme. This is, of course, symptomatic of the enormous cost of land on Manhattan Island. The fact that Columbia could depend for her architectural effects neither upon great space nor upon any striking configuration of the ground, as is the case at Wisconsin and California and Cornell, accounts for its second characteristic, the unusually close uniformity of the buildings.

The scheme was at first regarded by not a few critics as unnecessarily expensive, cold, and formal. The high cost of the buildings was undoubtedly a severe temporary handicap, the great expense of each unit postponing sometimes for years the adequate support of important parts of university work. The buildings were likened to a tomb among factories, and the dormitories were later dubbed the Columbia prisons. The plan suffered from having to go into effect in so incomplete a form. One was forcibly reminded of a small boy who had lost his first teeth and had attained only three or four of his second set. With time, however, has come a vindication of the original conception. As the later buildings rose in their places, each improved the general appearance. This is true even of the inner building, Avery, which many had feared would crowd the campus unduly. Mr. Brunner, who designed the Mines Building, and Messrs. Howells and Stokes, the architects of the Chapel, succeeded in retaining the general harmony without losing their own individuality, and indeed, the chief architects, Messrs. McKim, Mead, and White, not only made Hamilton, Kent, and Avery far more beautiful buildings than the earlier Schermerhorn and Engineering, but introduced a pleasing variety in detail in the newer buildings, which has done much to soften the original severity.

Any plan of smaller and cozier buildings would have to-day been overwhelmed by the apartment houses towering on all sides, if indeed the growth in student numbers had not already forced reconstruction or renewal. The large scale, furthermore, provides for spacious and striking interior effects. Very few academic interiors in the world can compare in beauty with the vestibules of Journalism or Furnald, the reception rooms in the President's House, the trustees' room with its beautiful oak wainscoting, or the reading rooms of Avery and Kent. The latter indeed, two hundred feet long and lined with books, has caused one of the law professors to say that he has given up golf now that his legal researches furnish all the exercise that he needs. Finest of all are the soaring interiors of St. Paul's Chapel and the Library, the former in warm and harmonizing shades of brown and buff, and the latter green and gray and blue. Out of doors the old note of bareness has gone with the growth of ivy and the careful horticultural development of the grounds, and the many beautiful gifts that have come as class memorials and in other ways. Our site may lack the distinction which has come with centuries of care and of gentle decay to Oxford and Cambridge, but we may well be proud of not a few of our vistas, as, for example, that down Milbank Quadrangle to the Barnard buildings, or across the Green to the Gothic turrets of Union Seminary, or, finally, the view under the trees from the Faculty Club across South Court, with its ancient yews and its fountains, to the statue of Alma Mater and the façade of the Library.

Outside the general architectural scheme are the Faculty Club and East Hall, relics from the Bloomingdale days, a small observatory, and a greenhouse. There are also four private houses north of East Field—the Deutsches Haus, the Maison Française, and homes for the Chaplain and College Dean. There is a fine boathouse on the Hudson, and in the plans of the trustees and the hopes of the undergraduates lies a stadium to be erected upon an athletic field to be reclaimed, when funds are available, from the waters of the river, which are providentially shallow along shore at One Hundred and Sixteenth Street.

Across Broadway from the central group are the Barnard College buildings, which were designed by Hugh Lamb and Charles A. Rich. They are on a slightly smaller scale and their terra-cotta trimmings make them more ornate, but they harmonize well with the University buildings. At the northern end of the Barnard property, Milbank, Brinckerhoff, and Fiske lie on three sides of a pleasant court. At the southern end of the intervening Milbank Quadrangle, which extends for three city blocks, is Brooks, a beautifully designed and decorated dormitory for women. Barnard has ambitious plans for additional buildings to complete the Milbank Quadrangle, and fortunately the outlook for their early construction is bright.

The rapid growth of Teachers College has filled the city block to the north of the Green almost solidly with buildings by various architects and of varying architectural success. The Main Building—the first academic structure, by the way, to be erected at Morningside, in 1894—Milbank, which contains a beautifully decorated chapel, a memorial from the donor of the building, Joseph Milbank, to his parents, and the admirably equipped Thompson Physical Education Building, all face One Hundred and Twentieth Street. On the One Hundred and Twenty-first Street side are the Macy Manual Arts Building and the most recent structure of the group, Household Arts, singularly successful in the combination of large windows and abundant sunshine, with good architectural effect. On Broadway is the handsome building of the Horace Mann School, and on Amsterdam Avenue a combined women's dormitory and apartment building. In addition, Teachers College has half a mile to the north the Speyer Building, combining a demonstration and experiment school and a social center. It is also developing, near Van Cortlandt Park, a plot of fifteen acres, recently purchased, partly for school purposes and partly for faculty and student residence.

The best buildings at the site of the College of Physicians and Surgeons are on Tenth Avenue, between Fifty-ninth Street and Sixtieth Street—the handsome and excellently equipped Sloane Hospital, with 173 beds for women and 100 cribs for infants, and the Vanderbilt Clinic. Three of the four other buildings, lying to the east of these. were put up just before the change already mentioned, from the didactic to the laboratory and clinical method in the teaching of medicine, and as a result are none too well adapted to their present purposes. Leaving the question of architectural beauty aside, there is a certain resemblance between the buildings and equipment of the College of Physicians and Surgeons and that of some of the more progressive colleges of Oxford. In both there is much admirable modern equipment, upon which the observer comes unexpectedly in inconvenient locations.

Whether the present home of the "P. & S.," as it is affectionately called, is to be changed is a moot question. East Field was purchased primarily to bring the Medical School into the University group, but the Sloane Hospital and Vanderbilt Clinic and the recent alliance with the Presbyterian Hospital are strong anchors to hold the school downtown, and for the present, at any rate, plans for removal have been postponed.

The College of Pharmacy occupies an ornate Renaissance building on Sixty-eighth Street, near Broadway, specially constructed and well equipped to meet its particular needs.

To complete the catalogue of buildings, one must mention the farmhouses at Fishkill and the fourteen buildings that go to make up the equipment of Camp Columbia for engineering students in the Connecticut Hills, near Litchfield.

King's College had rather a notable collection of books, including a complete collection of the publications of the

Oxford Press. Perhaps a hundred of these early volumes still remain on the shelves, the others were lost or destroyed during the Revolution. Seventy-five years later the library had not yet recovered from these losses, the collection being then a small and inaccessible affair of about 15,000 volumes, under the sole care of an officer whose salary was $300. In 1881, however, Stephen Whitney Phœnix, '59, bequeathed his library of 7,000 valuable volumes, and two years later a professional librarian, the enthusiastic Melvil Dewey, was appointed, who in a single year increased the circulation of books fivefold. During Dewey's three years of service many books were bought and a short-lived school of library economy was founded.

At Barnard's death the library had about one hundred thousand books. Mr. Low gave particular attention to its development, the new men called to the faculties called vigorously for books, and the collection from then on has grown rapidly, until at present the University possesses some five hundred and thirty thousand volumes and one hundred thousand pamphlets, including sixty thousand doctor's dissertations. The various catalogues contain a much larger total of cards, descriptive and analytical. The library counts to the full upon the opportunities furnished by the other collections in the city, particularly the public library, and it has furthermore a system of borrowing and lending rare books with university and other libraries outside of New York.

James H. Canfield, who was librarian from 1900 to his death ten years later, gave particular attention to efficiency of service and used to boast that, while it required two days to get a book in a German and two hours in an English university, at Columbia it took but two minutes. The library staff is now greater than was the entire teaching staff of the institution thirty-five years ago.

Like every other progressive institution, Columbia is struggling with the problem of combining a centralized administrative control with professorial initiative in purchases, and with the distribution of books and duplicate catalogue cards to those points all over the buildings where they will be of the greatest actual service to students and officers. The problem is incapable of an ideal solution. Although the librarian, for example, is not afraid to purchase several copies of standard books to supply the departmental libraries, forty-three in all, he cannot with his limited funds do this in the case of expensive but much used journals.

This question of limited revenue is a very serious one, and, unless through special endowment or otherwise the library can receive a very much larger income, it must expect to lose its present high position among university collections. A professor recently called from one of the newer State universities complained, with no small bitterness, that the allowance for books in his particular field was five times as great there as at Columbia.

Although the library cannot afford to be in the market for rare and beautiful books as such, not a few of these have come through gifts, including several illuminated manuscripts and two hundred and fifty incunabula. It has also some valuable autograph material, including the correspondence of DeWitt Clinton, and an extraordinary collection of newspaper clippings relating to the Civil War. The interesting and rapidly-growing collection of *Columbiana* has been of much service in the preparation of this volume. Through the generous co-operation of friends, notably the late J. Pierpont Morgan, and Alfred White, the library has been able to supplement its own collections and to arrange in recent years for many public exhibitions, usually held in connection with some anniversary celebration.

The practical usefulness of the library depends in large measure upon the separate school and departmental collections. The most sumptuous is the Avery Library for Architecture and the Allied Arts, a memorial to a young architect, Henry Ogden Avery, who died in 1890. The nucleus was his own collection of books, which, it is interesting to remember, was deposited at Columbia because his parents wished the collection to be available to practicing architects and draftsmen, and Columbia's was at the time the only library open in the evening. Through the generous and intelligent support of Mr. and Mrs. Avery, the nucleus has grown to be one of the great fine arts collections in the world, with 21,784 volumes and with its own special building erected by Mr. S. P. Avery in 1912 as a memorial to his brother and his parents. The Bryson Library at Teachers College of nearly one hundred thousand volumes is one of the best collections of educational works in existence. The Law Library of about fifty thousand, on the other hand, has been running behind through insufficient support. The alumni of the Law School, however, are now interesting themselves in its improvement. The collection at the Medical School has recently been enriched by the personal collection of the late Dr. E. G. Janeway and by the support of Mrs. Russell Sage. Barnard has a good working collection, largely supported by her alumnæ. For the undergraduates there is a college study in Hamilton, and similar provision is made for the students of Journalism.

In general, each department and laboratory has its own special reading room, with books at hand for immediate and informal use. Some of these are unusually well equipped, as for example the biological collection given by the late Charles H. Senff, the George Rice Carpenter Memorial Library for English, and an extraordinary collection of books presented by the Chinese Government in recognition of the establishment of the Dean Lung Professorship, one of the many endowments which the University owes to General H. W. Carpentier of the Class of '48.

Perhaps this is not a strictly logical place to speak of the books and articles going out from the University as contrasted with those coming in, but, until some device is found for the presentation of printed material in two or three dimensions instead of the one to which we are at present limited, is such a thing as a really logical arrangement possible?

The University Bibliography for 1912 contains sixty-four closely printed pages. Including the prolific Teachers College, it records sixty-nine general series and thirty-one departmental bulletins and series. Alumni and student publications number nineteen, some of the latter, by the way, being of real scholarly importance, as for example the *Columbia Law Review.* The personal bibliography of the professors fills fifty closely printed pages.

There had been an occasional broadside list of the students of King's College, but the first annual catalogue was printed by the janitor in 1848. Last year, beside school and divisional bulletins aggregating 1,789 pages, there was printed a catalogue of 626 pages, a list of officers and alumni of 1,151 pages, and a volume of *Annual Reports* of 352 pages. This last shares with the *University Quarterly* the important function of revealing the University to its own members, as well as to the public at large. Since Barnard's first report, the president's own contributions to this volume have always been of importance, but the supplementary material, included since 1880, had been rather perfunctory until in 1900, through its frank discussion of larger problems and forecasts of the future, rather than devotion to technical details of registration and the like, the first report of Teachers College set a model which later reports from deans and other administrative officers have followed.

The Columbia University Press, founded in 1893, has published 175 volumes, many of them of distinct importance to scholarship. Its most ambitious project is a complete collection of the works of John Milton, now being prepared under the editorial supervision of Professor Trent. A University Bookstore under the auspices of the Press has been maintained since 1898.

In 1890, there appeared a *Bulletin,* " issued by authority " and singularly unattractive in appearance. It was principally a rehash of the college regulations and abstracts from the records of the trustees' meetings. Its issue was irregular and there were no editorials until 1895. Three years later the University Press took over the publication, and in 1898 it appeared as the *Columbia University Quarterly.* To-day the *Quarterly* is one of the standard publications of its type. It contains more than five hundred pages annually and is admirably illustrated. While special issues dealing comprehensively with some particular field of University activity are an important feature, a broad editorial policy does not confine the articles and editorials to matters dealing narrowly with Columbia's immediate interests.

Of the University journals and series, the only ones antedating Mr. Low's inauguration are the *Political Sci-*

ence Quarterly, a journal of international influence, dating from 1886, and the *School of Mines Quarterly*, from 1881. The *Educational Review* began in 1890, as did the *Studies in History, Economics, and Public Law.* Of later publications one of the most important is the *Romanic Review.* Teachers College, which has its own publication office, maintains not only the *Teachers College Record*, established in 1900, but the *Columbia University Contributions to Education*, 1906, and other important series.

Not so many years ago it would have been appropriate and easy to classify the general equipment of an educational institution as library, museum, fine arts collections, and, perhaps least important, laboratories or cabinets, as they were then called; to-day, however, laboratories are not confined to natural philosophy, but are being established for history, politics, statistics, and journalism. Books are "tools," and museums have become teaching collections. The well-equipped Deutsches Haus and Maison Française are not merely libraries or museums, but are working instruments of culture of a new and important type.

In general, the Columbia equipment is for use rather than for show, and anything that is not in frequent use is not provided, if it is available elsewhere in the city. Although one piece of laboratory equipment dates back to King's College, a telescope borrowed and used by George Washington, the real development of the laboratories began with the removal to the present site, the crowded conditions at Forty-ninth Street making much growth there impossible. The present mechanical engineering laboratory is vast enough to make a full-sized locomotive appear no larger than normal, and others are in proportion. In general, though not uniformly, the equipment is adequate. The equipment for natural science at Barnard College is particularly good and the household arts laboratories of Teachers College supply the last word in their new fields of study. Much of the University laboratory equipment, and far from the least useful, is home-made; this is notably true in mining. Certain departments owe their equipment to special gifts, as for example the Phœnix laboratories for physics, the Worthington and Allis laboratories in mechanical engineering, the recently opened Nichols laboratory for chemistry, and those for experimental surgery and cancer research.

Gymnasiums are to-day regarded as laboratories for physical education. The University gymnasium was the first of the great academic structures for this purpose, and is still in the front rank. Physical education is prescribed for the younger students, and the annual use of the gymnasium and swimming pool is more than eighty thousand. The more recent Thompson Building at Teachers College is lavishly equipped for research in physical education.

When Arnold Bennett visited Columbia not long ago, what seemed to interest him the most was the sight of a Chinese student in the modern history " laboratory," collecting clippings from German papers about the war between Italy and Turkey. Through the aid of a former Tammany chieftain, Patrick McGowan, a politics laboratory has been well equipped, and laboratory work is also being done in statistics, legislative drafting, and perhaps most notably in journalism, where the " cubs," among other tasks, are required to watch a moving-picture reel and then to describe what they have seen.

At Columbia there is no general policy with regard to the collection of scientific equipment in museums and elsewhere, this being left primarily to individual or departmental initiative. The only general University policy is a negative one of an unwillingness on the part of the trustees to duplicate, beyond small teaching collections, the wealth of the public and available private museums of the city. The Torrey Herbarium dates from 1860, and Rutherfurd's Photographic Star Plates come shortly afterwards. Both of these are of genuine scientific value and both were prepared and given by trustees. The Chandler Chemical Museum and the Egleston Mineralogical Museum had their beginnings in Barnard's time. Besides these, perhaps the most significant museums are those of anatomy, recently made available for teaching and exhibition purposes by the gift of Edward S. Harkness (to whom the University is also largely indebted for the financial provisions for the recent alliance with the Presbyterian Hospital), the Educational Museum of Teachers College, and a Dramatic Museum designed to stand in the same relation to the arts of the drama as the Avery Library stands to those of the architect, decorator, and landscape architect. In the Students' Building is a museum *sui generis,* the athletic trophy room, which contains among other treasures the shell of 1878, the only one in which an American crew ever won a race at Henley.

The devoted custodian of the Avery Library, Mr. E. R. Smith, has made a catalogue of the fine arts collections of the University, which contains a surprisingly large number of items. Practically all have come by gift, subject since 1898 to the approval of an advisory committee on art. In addition to $150,000 for an athletic field and towards a memorial hall, and in addition

St. Paul's Chapel

also to numberless direct gifts to needy students, to fraternities, athletics, and other student enterprises, alumni subscriptions have provided most of these objects of art. They have usually been class memorials and include portraits, busts, gates and other ornamental iron and bronze work, stained glass, clocks, and even a spherical sundial. As the list in the Appendix will show, these alumni gifts include also loan and scholarship funds, gifts of books and scientific equipment, and, at Barnard College particularly, of shrubs and trees.

The sculpture possessed by the University, more than one hundred pieces in all, includes French's Statue of Alma Mater, Barnard's Great God Pan, Partridge's Alexander Hamilton, and examples of the work of Saint-Gaudens, Ward, Couper, and Chaplin. There are also good copies of classical statues, for which the University is indebted to Dr. J. Ackerman Coles, '64, and others. By order of the trustees, by gift, and in other ways, we have come to possess a large collection of portraits, scattered through various buildings, of Columbia dignitaries, by various hands and of varying merit. These paintings include works of Copley, Vanderlyn, Trumbull, Ingham, Eastman Johnson, Daniel Huntington, and, among later men, of Irving Wiles, F. D. Millet, W. T. Smedley, Sargent Kendall, Müller-Ury, and J. W. Alexander.

The corridors of the Barnard and Teachers College buildings have for some years had a good collection of engravings, photographs, and casts, and, through undergraduate gifts, Hamilton Hall is gradually acquiring an excellent collection of engravings for its walls.

There are several good pieces of stained glass, the most striking being the LaFarge windows in St. Paul's Chapel. Indeed, all the equipment of the Chapel, from the Italian chancel furniture, and the fine organ, (presented by George Foster Peabody and Charles Peabody,) down to the minutest details, were selected with the greatest care and insight, and as a whole and in all its parts the Chapel is one of the most precious artistic possessions of the University.

Much attention has been given not only to the words, but to the form of the inscriptions upon the buildings, and no more beautiful example of an academic inscription can be found than that upon the portico of the Library:

KINGS COLLEGE FOUNDED IN THE PROVINCE OF NEW YORK
BY ROYAL CHARTER IN THE REIGN OF GEORGE II
PERPETUATED AS COLUMBIA COLLEGE BY THE PEOPLE OF THE STATE OF NEW YORK
WHEN THEY BECAME FREE AND INDEPENDENT
MAINTAINED AND CHERISHED FROM GENERATION TO GENERATION
FOR THE ADVANCEMENT OF THE PUBLIC GOOD AND THE GLORY OF ALMIGHTY GOD
MDCCCXCVI

That extreme care in such matters is well worth while may be illustrated from some of the inscriptions as they were originally drawn. In the inscription over the door of Earl Hall, for example, the most conspicuous line, as originally sketched on the stone, read, "Erected that religion and learning may go," but that they were to go "hand in hand," was made clear only by a rearrangement of the lines. Similarly, the text from St. Paul, "Whom therefore ye ignorantly worship, Him declare I unto you," etc., was first laid out so that all that could readily be seen was "Ignorantly worship Him."

IV

EDUCATIONAL ORGANIZATION

Graduate Faculties. Columbia College. Barnard College. Law, Mines, Engineering, Chemistry. Medicine. Architecture. Teachers College. Pharmacy. Journalism. Summer Session. Extension Teaching. Departments and Divisions.

BEFORE a brief summary of the different schools of the University is given, the reader is again reminded that the plan of this book is to emphasize the whole institution rather than its separate parts, and also that those things which are characteristic of American colleges and professional schools in general are omitted. If, for instance, the Law School is dismissed with a page or so, it is not because the Law School is not an admirable institution with hopes for the future as high as its past has been distinguished, which is saying not a little.

The heart of a university, indeed what makes it a university, lies in the work of pushing out the frontiers of knowledge. It was primarily with this work in view that Columbia has developed what are very inaccurately known as its non-professional graduate schools. In the first place, they are not the only schools in the University for which a college degree is required, and more important they are not and can never be strictly non-professional. It is fortunately less true than formerly, but is still controlling for a majority of students, that the only way open for the scholar to make a living is to teach, and therefore these schools inevitably take to themselves the aspect of professional schools for the training of teachers. It would be as difficult, furthermore, as it would be unprofitable, to press to a logical conclusion the distinction between professional and non-professional in the subjects of study themselves. Every fruitful field of study rightly tends to connect itself more and more closely with some profession. To name but a few, philosophy and psychology shade into education, English into journalism, political science into law, physics into engineering, biology into medicine. One of the most important functions of these schools lies in broadening and liberalizing the work of the professional schools and inspiring them with the spirit of research, while on the other hand the presence of the professional schools is a constant and necessary stimulus to them.

The existence at Columbia of three separate faculties —of Political Science, Philosophy, and Pure Science—is based upon historical rather than upon logical grounds, and was the result of having to cope not with a theory, but with actual conditions of human jealousy and rivalry. Although Barnard had urged the graduates of the College " to enter a path to which so few are spontaneously inclined, the path of independent investigation with a view to enlarging the bounds of knowledge," and though he persuaded the trustees to establish fellowships, little in the way of organized advanced work was accomplished until in 1881, on the initiative of Professor Burgess, the School of Political Science was established, " designed to supplement the courses in Private Law with those studies in Ethics, History, and Public Law necessary to complete the science of jurisprudence." Its faculty has always been a powerful element in the University policies. For nearly a quarter of a century it was small and compact, and because of this and of the fondness of its members for tobacco, it was known to the students as the "nicotine ring." About 1904 came a rapid growth in its membership to include the newer developments of social science, and a close alliance was formed with the New York School of Philanthropy.

The first great victory of the "University Party," after President Low's election, was the creation in 1890 of a Faculty of Philosophy. It is characteristic of the brevity of an academic generation that of this original faculty but a single member is to-day in teaching service. Two years later the new university spirit had sufficiently overcome the old jealousies to permit the establishment of a Faculty of Pure Science, composed at first almost exclusively of professors in the School of Mines, with one man from the Medical School and two new appointees in zoölogy. Later came many new appointments at Morningside, closer relations with the School of Medicine and with the museums of the city.

The professional relations of the Faculty of Political Science have been largely with the Law School, those of the Faculty of Philosophy with Teachers College, and those of the Faculty of Pure Science with Medicine and Engineering.

Under the eye of the University Council, and with no undue pressure to secure uniformity as to details, the three faculties went their several ways, leaving the departments generally in control of individual students, until the day arrived in 1909 when it was possible to unite them by the appointment of the senior dean, Professor Burgess, to serve as the dean of all three. Since then more attention has been given to the actual organization of the advanced work; and also to the apparently insoluble problem of defining where the jurisdiction of the department ends and that of the faculty begins. The actual administration is unified by means of a joint committee on instruction which, as the retiring dean has pointed out, is an institution as unknown to the law of the University as the cabinet of the president is unknown to the constitutional law of the nation, but in its modest sphere equally as effective.

Owing to the slowly dying doubts of our fathers as to the capacity of the female mind, the matter of advanced instruction for women has furnished one of the most complex problems in the development of these schools. A woman student received the degree of doctor of philosophy in mathematics in 1886, but it was not until some years later that women who had already received the bachelor's degree began to apply in numbers for admission. They were at first permitted to enter University classes under the non-committal title of auditors, were examined as Barnard College students, and received degrees on the formal recommendation of the Barnard faculty. The appointment by Barnard College, beginning in 1895, of productive scholars of distinction competent to offer courses which the men students desired was made the basis by President Low, who had personally provided the funds for two of these appointments, of urging the graduate faculties to give more generous treatment to women students, and five years later women holding the first degree were admitted to graduate courses as regular students of the University. The close relations between the so-called graduate faculties and the professional schools of medicine, law, and engineering, which do not admit women students—professional and non-professional students frequently attending the same classes—still hampers the women in certain fields, but in general their opportunity for graduate work is now as broad as that of the men.

The degree of Ph.D. has been conferred in the United States for about fifty years. For many years Columbia's contributions to the list of doctors, though sometimes individually important, were few in number. The broadened opportunities coming after 1890, and particularly the establishment of twenty-four fellowships, soon brought about a change, and Columbia has conferred more doctorates than any American university within the past sixteen years, over seven hundred in all. The master's degree, which nominally requires one year of residence instead of three, is even more popular, and more than five hundred masters were created at the commencement of 1913.

The total registration of these three schools is by far the largest in the United States, the gross registration for 1912-13 being 2,241. It is significant of the close interrelations between the different parts of the University that, of these students, 445 were also registered in professional schools of the University, 168 in theological schools or the School of Philanthropy, and 83 were junior officers. In considering these large numbers, it must be remembered that, owing to its position in the city of New York, the University attracts to its graduate schools a large number of teachers in active service and others who can give but a part of their time to study, a class including representatives both of the best and of the worst type of student in the graduate schools.

The distribution of students among subjects is more even at Columbia than is often the case. In more than sixteen different departments there are twenty-five students or more offering a major subject. Classified by divisions in the order of student preference, political science leads, followed by the modern languages, education, philosophy, biology, and chemistry.

The immense numbers and the fact that students are attracted to these schools for reasons as wide apart as the poles mean that the problems of their administration are destined to be difficult and pressing for many years to come. Under the new dean, Professor F. J. E. Woodbridge, they are being grappled with fearlessly and intelligently. It is recognized that admission to candidacy to a higher degree should depend not merely upon college graduation, but upon special preparation for advanced work in some particular field, a very difficult matter to ascertain in advance. Many of those admitted even under these conditions should be weeded out before the final examination, when the temptation to be kind usually overcomes the duty to be stern. Progress will be slow and painful, furthermore, while identical machinery is used to deal with the school teacher whose promotion depends upon the acquisition of a master's degree, with professional students desiring to broaden their horizon, and with the many who are desirous and the few who are capable of devoting their lives to the increase of the world's store of worth-while knowledge.

To the inquirers of 1857, one frank critic stated that in reality Columbia College was little more than an appanage to the more popular grammar school. The grammar school, however, departed and the College remains. Thirty years later the College had apparently become something like a vermiform appendix in the organization of professional schools, and Barnard had come reluctantly to the conclusion that the public interest demanded the giving up of undergraduate work. A member of the Faculty of Political Science has told me that, if it had not been for the support of that faculty at a critical moment, Columbia College would have ceased to exist. To-day the College is recognized as having an essential function in the work of the University. It is growing rapidly, having now more than nine hundred students. Though closely allied to the graduate schools through the departmental organization, and to the professional schools through the combined courses, it has nevertheless retained its own personality. It enjoys at the same time the stimulus which comes to teacher and student alike from contact with men of world-wide renown and with a strong body of professional and graduate students. Its individuality has been emphasized since 1907 by the possession of its own building. Before that time French had been taught in the bookstore, English and mathematics in the physics building, history next the lunchroom, and its official home was in a dark and dismal basement. A test of the present vitality of the College is its ability to absorb into the student life each year a larger number of students admitted to the upper classes, proportionately to the total registration, than any other institution of the country.

Never has a college been more frequently pulled up by the roots. Between 1763, when Myles Cooper revised the curriculum to make it correspond with that of his own Oxford college, until 1905, when the minimum requirements still in force were adopted, the records show no fewer than eleven revisions of its program. Most of them, since the premature experiment of 1857, have been backings and fillings as to the elective system. The revision of 1905, based upon a study started by President Butler's first report, was more fundamental, since it defined the University policy as to the combination of collegiate and professional school work, and placed the emphasis in college work upon quality rather than on time spent in residence. Columbia was one of the first to adopt the principle, at present widely followed, of giving extra credit in some form or other for high standing and a corresponding penalty for too great a number of low passing grades. The earnest student found a new incentive for good work, and what is perhaps equally important, in view of the manifold temptations for soldiering that beset the modern collegian, the idler discovered that the opportunity for lax scholarship had been very much curtailed.

Proposals have since been made for further radical changes in the program, which includes a considerable core of prescribed work in language, mathematics, science, history, and philosophy. A careful analytical study of the actual performance of the last senior class, however, undertaken at the behest of the faculty, shows that the proportion of students continuing subjects beyond a prescribed course is large enough to disprove the argument that a prescribed course *per se* makes the subject distasteful and discourages its further pursuit. It shows, further, that the proportion of students who carry elective courses in a given field beyond two terms is high enough to disprove the charge that there is any general tendency towards scattering. And, finally, the study makes clear that the student generally chooses wisely as to the subjects upon which to concentrate.

It may be stated as a general principle that the more a faculty actually knows about the students and their interests the less likelihood there is of elaborate revisions based upon *a priori* reasoning.

In Columbia College, English is by far the most generally followed subject, with one-fifth of the total registration. The next is physical education, prescribed for underclassmen, and then follow in the order named history, mathematics, philosophy, Romance and Germanic languages, chemistry, politics, Latin, and psychology.

Within recent years the College administration has devoted its attention particularly to efficiency in teaching, to personal care for all students, and to the administration of the spirit rather than the letter of the law. In general, less attention has been paid to the minimum requirements and more to furnishing opportunities for the exceptional student.

Since 1906 an attempt has been made to limit the membership of the faculty to the men primarily engaged in college teaching, but for historic and sentimental reasons this has as yet been but imperfectly accomplished.

In his recent "swing" around the academic circle, one of the things that impressed Dr. Slosson most vividly was the general waste of time and energy in the ordinary collegiate instruction. Much has been accomplished at Columbia to improve conditions in these regards since the organization in 1907 of a committee on instruction of the faculty. Under the leadership of its first chairman, the late Professor G. R. Carpenter, who literally gave his life to this work, a largely successful struggle was maintained with departments whose primary interests were in advanced work. Small sections, carefully planned courses, and intelligent grading for college students were insisted upon, and a device for a logical and honest check on absences was discovered. There is always a danger lest the newer forms of study which relate to the intellectual development of mankind make too light a demand upon the student's mental activity. A definite attempt has been made to increase this demand without overloading the course with trivial and uninteresting drudgery. That the attempt has not been altogether unsuccessful is shown by the senior votes, which place the prescribed course in history at the head of the list alike for difficulty and for general usefulness. That the successful experience of the natural sciences is leading to the use of laboratory methods in these other fields has already been mentioned. In addition to its work with the departments, the committee, of which the dean is now at the head, makes a careful study of the individual programs, prescribes two sequences of study for each student, and executes a rigorous weeding out of the unfit and the idle. It is often a real kindness to a boy to bring his college career to a close. One is reminded of the Delphic saying that the colleges turn out some of the best men in the country. The important thing is to be sure that it is not the wrong boy who is turned out, and to this problem the committee gives careful attention. The grades of each student are reported frequently, are watched like the temperature record in a hospital, and made the basis not only for official warning but, what are usually more effective, congratulations upon improved work.

In the vigorous words of the president, "the notion that an institution of learning could not or should not concern itself with the character and conduct of the students outside the classroom or off the campus is bosh; all of the boy goes to college, not a part of him only." The care of the whole student is fortunately becoming typical of the good American colleges and it is not necessary to go into particular details as to the efforts made to that end at Columbia. The professors and the dean endeavor to be available at all times to the students and, of the 5,700 visits from students and their parents and advisers to the latter last year, more than half related to matters not having to do with the formal curriculum. An endeavor is made also to learn just as much as possible about each student. The careful work of the committee on admissions enables the dean to start with a fairly complete knowledge of what the boy has accomplished at school and what his teachers think of him, and his record at college is checked in other matters than the formal grades. The negative side of student records is often of considerable importance. The boy who is not in any fraternity and who does not belong to other student organizations, who is the only boy from his particular school, is pretty sure to be a lonely boy and as such needs all the care the college can give him. It is regarded as the duty of the college to see that the choice of diversions for such a boy is not limited to the unwholesome and unprofitable, but includes also the wholesome and the profitable.

On the other hand, the College endeavors not to overdo this matter. The business of school and college education is the making of boys into men and, as in the modern practice of medicine, the job is best done when the patient does most of it himself. The important thing is to develop in so far as possible the student's own sense of responsibility, and for this reason the system of advice to students at Columbia is frankly an insurance that each student has someone to whom he has the right to turn if he cares to do so, rather than a system of close supervision. The very definite limit as to the amount of work of this kind that a faculty can be counted upon to do, willingly and efficiently, is, by the way, an important factor in this matter of student advisers.

President Lowell's statement, that by the free use of competition athletics have beaten scholarship out of sight in the estimation of the community at large and in the regard of the college student body, may need some qualification, but there is no doubt that one of the things for a live college to do is to devise methods of intellectual competition, and particularly such methods as will not only hold the students already turned towards scholarship, but will entice into that field students not already interested but of potential capacity. As early as 1785 public examinations were arranged to which the men of letters of the city were invited, which "should encourage the industry and emulation of the students," and honorary premiums were distributed to the most deserving. The revision of 1810 was for the announced purpose of enticing to laudable emulation no less than for preventing and punishing of faults. From then on various devices were tried. All, however, were directly connected with the regular program and, as has been pointed out, a subject once in the curriculum tends to lose all emotional interest for the student. In 1909, the committee on instruction recommended that the College should profit by the example of the English universities, where it seems to be better understood that culture is one of those things which may be and usually is lost in the conscious search for it. Accordingly, a program was devised upon which the student could enter at the end of his first year, which contained much less regular work, with fewer prescriptions and other regulations, and concentrated the student's attention upon two or three subjects for which much outside reading and informal conference were required. Comprehensive oral examinations upon the work of three years were established, and those successfully completing this program received a degree with honors. The system is not yet in permanent working form, but so far the results have been most promising. The number of students electing to study for honors is rapidly increasing, and there is no doubt as to their intellectual interest and rivalry.

In view of the present rapid rate of growth, it is very possible that a limitation of numbers in the near future will enable the College to strike a more definite note. While doubtless the old New York stock will always be represented, Columbia is not likely ever again to be a fashionable college *per se,* and the temptation is lessening to make it too much like every other college in the details of its student life and interest. Efficient entrance machinery cuts out the hopelessly incompetent. The different strains in the membership, particularly the boys of various foreign stocks, the influx of freshmen from out of town, and the students from other colleges, all unite in producing the social diversity which is a factor often unappreciated in college life. There are those who believe that the future of the colleges in the urban universities will lie in making an increasingly strong appeal not to all boys, but to the boys who are willing to ask frankly the question as to what one pays for the luxury of country-club existence, who have no desire to prepare themselves for a career of being amused, and who wish to begin to test their capacity with rivals of like mind not in the professional or graduate school, but in the college.

The present registration in the College is about 900, and the total number of living alumni more than 2,800.

To the students of educational history no part of Columbia University will be of greater interest than Barnard College. It was founded, under most discouraging conditions, to meet a real need of the community

—a first-rate college, primarily for the girls of New York City. In its organization to-day it is furnishing a model to women's colleges all over the country, and particularly in the Southern States, of a complete and independent college as an integral member of the university organization. The policy of growth by treaty has been discussed from the university standpoint. From the point of view of the independent college, it cannot be better set forth than in the words of the present Dean of Barnard, Miss Virginia C. Gildersleeve:

> "The College has succeeded to a considerable extent in creating and preserving the feeling of individuality and personal unity characteristic of a separate college, and at the same time profiting by the inspiration, the university standards of scholarship and personnel, and the hundred incidental advantages derived from membership in Columbia University. Our individuality as a distinct institution gives us an advantage, I think, over the women undergraduates in the great coeducational universities; and most assuredly our connection with Columbia gives us an advantage over the separate women's colleges. Inconvenient though it often is to have our finances separate from those of Columbia, I feel that on the whole the fact of our distinct charter and corporation is valuable in that it aids in preserving for us a sense of separate individuality. Were it not for this there might be greater danger of our being absorbed too completely in the vast university machine."

The College owes its existence as it does its name to the brave struggle made by President Barnard against indifference and distrust regarding the higher education of women. The movement which led to its actual establishment has been described in the chapter

Barnard College

upon that great leader. Shortly before his death, in 1888, the original niggardly resolution of the Columbia trustees, which it will be remembered made no provision for teaching women but only for examination, was broadened to authorize the establishment of an actual institution of learning, which should involve Columbia in no pecuniary responsibilities, and be managed by a corporation with trustees, constitution, and regulations to be approved by the trustees of Columbia; which might have buildings for instruction only, not for residence; whose students should be taught exclusively by professors and instructors of Columbia; and whose connection with Columbia could be terminated if unsatisfactory.

It was not a very generous treaty on the part of the trustees, but it was sufficient for the purpose and a great advance upon the older agreement. The problem of the new college, which was founded the following year, was twofold: to recommend itself to Columbia on the one hand, and to the public on the other. To both problems the trustees and teachers set themselves vigorously. Their success in the former was shown by the willingness of the University to entrust the College with the difficult problem of graduate instruction for women, while its own faculties were being educated up to the point of taking it upon themselves, and by the agreement of 1900, whereby, as its Provost has pointed out, Barnard became no longer an appanage, but an independent, self-supporting principality in a congress of states. Since 1900 its position has been unique among women's colleges, in that, while independent and interested in its own welfare, it has shared the responsibilities and ideals of a great university. The rapidity of this development is shown by the fact that, of more than one thousand alumnæ, all but a score are living.

A cynical observer of the higher education of women has said that apparently Jack and Jill must be educated exactly alike, particularly Jill. Barnard, however, has not desired nor has the University insisted upon an identity between its program and that of Columbia College. The combined college and professional course has been less developed, since there are at present fewer opportunities open to women for professional study. A start, however, has been made at Teachers College, and in Journalism and Architecture. Further development is a problem for the future, both to the University and to Barnard. As at Columbia College, a revised program was adopted in 1905, but, while the two are similar, they have important differences. For example, the B.S. course at Barnard is more carefully thought out and more thorough in its emphasis upon laboratory science than is that at the men's college. Like Columbia, Barnard is working upon the problem of emphasizing distinction in study, but along different lines.

As to Barnard's having recommended herself to the public, there can be no question. Under the leadership first of Miss Ella Weed and then, from 1894 until 1900, of Miss Emily James Smith (Mrs. George Haven Putnam) and Miss Laura D. Gill, 1901-07, the growth in numbers has been steady and it is now rapid. There are at present 636 students. It has been pointed out that Barnard can never be like a large country college, nor have the same sort of college life, but the students there feel that its difference from other girls' colleges is in many ways a thing to be proud of and that, through its contact with a great university and a great city, it can and does develop as fine and sane a student life as can be found at any American college. The prestige of the teachers is shown by the constant attempts both within and without the University to steal them from Barnard. Its wealth, as has been shown in the previous chapter, has grown from nothing in 1889 to $4,335,503.55 in 1913, and, although this is far from sufficient to meet its present needs, Barnard has always succeeded in getting help when she needed and deserved it, so that there is every prospect that the additional funds will be forthcoming. Indeed, the alumnæ are at present vigorously engaged upon a campaign for a fund of two million dollars for buildings and endowment to commemorate the twenty-fifth birthday of the College in October, 1914.

In the teaching of law, "the secreted wisdom of human society applied to its current affairs," Columbia was a pioneer. Chancellor Kent's famous Commentaries were developed from his lectures to her students. In 1859, Theodore W. Dwight, one of the great teachers of all time, founded the Columbia Law School. Dicey and Bryce have both borne witness to the nation-wide influence of this extraordinary man. For nearly twenty years he gave all the instruction himself and took upon himself all financial responsibility. When in 1876 the trustees took over its control, there were in the Law School no fewer than 573 students, an amazing number even for days when there were no entrance examinations, and when graduation was equivalent to admission to practice. The march of progress, however, is inexorable, overriding the views of any one man, no matter how distinguished in personality and devoted in service, and the time came when the trustees had to choose between Professor Dwight's method of teaching law—which depended far more than he himself realized upon his own skill and personality—and methods more in accord with modern university policies and aims. Largely upon the initiative of Stephen P. Nash of the Board of Trustees, and against Professor Dwight's judgment, it was decided in 1888 to lengthen and modify the course. In 1891, Professor Dwight resigned and what was practically a new school was organized under the deanship of Professor Keener, who had been a member of the Harvard law faculty. The five points which distinguished the new school from the old were, first, three years instead of two; second, the concurrent pursuit of several subjects; third, a distinct increase in classroom hours and discouragement of outside office practice; fourth, an elective system of study in the upper years; fifth, the combination of public and private law and provision not only for teaching but for research.

The changes aroused a storm of protest, particularly among the alumni of the old school, who were to a man Professor Dwight's devoted disciples, and the new régime started with a heavy handicap of unpopularity and had emphatically to justify its existence to the community. In 1899 it had obtained a sufficiently strong position to decide that, from 1903 on, admission should depend upon at least three years of college work. Beginning with Professor Keener's withdrawal into active practice in 1901, the progress of the school was checked by a number of changes in the staff. Far more than in the non-professional faculties, the teachers of a professional school, particularly one in a large city, are under constant and alluring temptation to leave the ranks, and the peculiarly personal character of instruction in a law school renders it important that its evenness and continuity should not be broken by frequent changes in the corps of teachers. Since the appointment in 1910 of Harlan F. Stone, the first graduate of the school to be its dean, the staff has been permanent and its members give their main attention to law teaching, with the result that the school has grown rapidly in numbers and prestige, and will doubtless soon have to face the problem of limiting its numbers.

Its method of work is described by the much misunderstood title " case system." Briefly stated, the method consists in the student's working out for himself, under the guidance of the instructor, the principles of law from decided cases, which of course are the ultimate authoritative source of all legal principles. Formal lectures are not generally given. The method of most instruction is Socratic; that is to say, the principles are extracted from the cases by the student under the more or less skillful questioning of the instructor.

Owing to its system of instruction, its cosmopolitan character, and its close touch with actual professional conditions, the school exerts a most important influence upon the legal profession throughout the United States. Less than half of the 472 students are registered as from New York City. The others come from thirty-nine different States and four foreign countries. The living alumni of the school number more than 4,500.

Perhaps the most significant single difference between the universities of Germany and America is the presence here of engineering and the engineering type of mind among teachers and students. The engineer has been called the dynamic component in human nature, the new force which is accelerating the wheels of progress, and his profession has been termed the art of directing the great sources of power in nature to the use and convenience of man. The presence at Columbia for half a century of both professors and students of engineering has certainly had a very great influence upon the institution as a whole.

When the School of Mines, the first of its kind in this country, was founded in 1863, three young enthusiasts—Professors Chandler, Egleston, and Vinton—took the entire responsibility for its finances. To the original three were soon added certain colleagues from the College and new appointees, notably Professor Trowbridge, who served as professor of engineering for many years. The first alumnus to receive a professorship was H. S. Munroe, still in service as the senior professor in the University.

The course of study, which was characteristic from the first in being composed exclusively of professional subjects, was lengthened from three years to four in 1868. A program with emphasis on metallurgy was added the same year. A course leading to a degree in civil engineering was established a year later, electrical engineering in 1889, mechanical in 1897, and chemical in 1905, a modest total when it is remembered that there are twenty-seven known species of engineering degrees conferred in the United States. The School of Architecture and the Faculty of Pure Science, both now independent, were originally founded in the School of Mines. Among the 650 and more students to-day, the most popular course is still the original one, that of mining engineering, followed in order by civil, mechanical, chemical, electrical, and metallurgical. Mechanical and chemical have both outstripped electrical engineering within the past few years, and at present chemical engineering is growing most rapidly. From the establishment of summer work in mining, in 1877, strong emphasis has always been placed upon the practical work of the students, and a vital feature of the programs of all candidates for an engineering degree is the summer camp of surveying at Morris, Conn., where three hundred men work annually.

Probably the first example of taking a man from a purely executive post and appointing him to a position of academic responsibility was in the selection in 1905 of the Superintendent of Buildings and Grounds, Mr. F. A. Goetze, to be Dean of the Faculty of Applied Science. Under the new leadership, there was a vigorous improvement not only in teaching, but in clearing out duplication of effort. This had grown up through the overlapping of the several engineering fields, until no student could properly perform the stated requirements. These were first simplified and then honestly administered. The first year's work in the different courses was made uniform, a step without which further advances could not have been taken. The next step was a fundamental one. It had become evident that, with the rapid growth of engineering schools based upon high-school preparation, Columbia's best contribution to the nation would be in the special type of instruction which could be given only to men who were willing to lay a broad foundation for it. After careful consideration, it was resolved to reduce the course to three years, but to require for admission a preparation of at least three years' serious college study, in which fully half the time should be devoted to sequential work in the underlying subjects of mathematics, physics, and chemistry, and the remainder to training in history, philosophy, English, and modern languages, and special preparatory work in drafting and the like. Columbia College has organized a program devised to meet the particular needs of this plan, which is to go into effect in 1915, upon the occasion of the fiftieth anniversary of the founding of the School of Mines.

There is considerable rivalry between Columbia and the University of Pennsylvania as to which deserves the honor of being the pioneer in medical instruction in America. Apparently King's College was the first to organize a medical department, and the College of Philadelphia the first to grant medical degrees. Our medical department was resuscitated with the academic department after the Revolution, but in 1807 an independent College of Physicians and Surgeons was organized, which soon took the lead from the older school. The two were merged in 1813. The connection with Columbia was re-established loosely in 1860 and absolutely in 1891.

Until 1887 the College had a strong reputation as a first-rate school of the old theoretical type, proprietary in management, and with haphazard hospital connections. In 1887 came the generous gift of the Vanderbilt family, which made provision for laboratory instruction, and three years later the merger of its independent charter with that of Columbia University. Scientifically its most notable achievement had been the organization, about the middle of the century, of a department of physiology under John C. Dalton, who was the pioneer in this field in America, and a department of pathology under Francis Delafield, with modest laboratories supported by the alumni.

In comparing law and medicine, it should be remembered that the Law School is approximately what it was in 1895, whereas the Medical School is hardly recognizable as the same institution. Instead of being, as the records seem to show, one hundred and fifty and sixty years old respectively, the Columbia Law School is, say, twenty-one or twenty-two, and the College of Physicians and Surgeons is barely ten. Pedagogically speaking, medicine is by far the younger and less developed.

Professor Lee has defined the policy of the College as one of conservative leadership, and the conservative part of this definition was never more clearly felt than in the decade between 1890 and 1900, when, under the terms of the merger, all initiative with regard to medical matters was to lie not in the trustees of the University, but in the faculty of medicine, which had come over intact from the old order. The dean, Dr. J. W. McLane, who had been president of the independent College, and his colleagues were satisfied with things as they were. The school was the largest in the country, having reached its maximum membership of 809 in 1902. In spite, therefore, of the establishment of the Johns Hopkins Medical School and a much needed local rivalry which came from the establishment of the Cornell Medical School in New York City in 1898, little was done until the end of the ten-year period. The trustees of the University were then in a position to take hold and, against the recommendations of the dean and of several of the older professors, instituted certain fundamental changes in the school, in order to bring about the change from the old teaching of medicine to the new. This change has been summarized as follows: "What the medical student got at his school in the old times was a little practical knowledge won at first hand in the dissecting room and at the bedside, a great many talks about what his professors had seen or read about, and much advice about what he had better do under certain specified conditions. . . . To-day, the burden of medical teaching lies in the endeavor to afford the student the opportunity to see for himself the things and processes which concern the human body both in health and disease, and to teach him to study these logically in all the lights which any phase of science may throw upon them."

Before the reorganization took place the school was still based upon a pattern which had descended from the seven traditional chairs of the old proprietary school, and which gave no adequate representation to the laboratory sciences. The year 1903 was a notable one; the department of surgery was reorganized and an entirely new department of pharmacology and therapeutics was established, with Dr. S. W. Lambert, the present dean, at its head. In these radical changes some mistakes may have been made, but the trustees worked impartially and sincerely and something was absolutely necessary to put the school upon the basis of a university department. Dr. James W. McLane, however, retired, after a faculty service of thirty-five years, and several of the older professors went with him.

The new dean was the first to protest publicly against the organization known as the private quiz, which every ambitious student, if he desired a hospital appointment after graduation, was practically forced to join at a heavy expense in order to get the individual teaching which the school itself did not provide. This quiz, it may be said, was the lineal descendant of the old plan, formerly prescribed by law, which assigned a preceptor to each student of medicine. By improving the actual instruction in the school, the quiz was made no longer necessary and has practically disappeared. Another example of how recent is the placing of medical education upon a plane with the other sciences, is the fact that until 1903 there was no reference library for the students. It was not until 1910 that the new requirement of at least two years' special college preparation went into effect, insuring good material upon which to work. As a matter of fact, the majority of students are now college graduates.

In recent years the advances have been steady. In 1909 the whole series of sciences which had grown out of the original chair of pathology were reorganized, as was the department of medicine. In speaking of the new order of things at the Medical School, particular credit should be given to a group of younger men who have sacrificed advancement in practice for the purely scientific side of their profession. The high repute in which the school is now held throughout the country is in large measure due to the researches and publications of these men. The opportunities for further research have been greatly increased by the bequest of the late George Crocker, the income of whose bequest of nearly $2,000,000 is to be used first for the stamping out of cancer and, when that problem is solved, to fight other ills that flesh is heir to.

One of the worst features of the old order of things was the limited hospital opportunities open to students. These depended wholly upon the appointment to honorary professorships of members of the staffs of the different hospitals, entirely regardless of their skill and interest in teaching. Under such conditions the actual hospital opportunities of the students were naturally spasmodic and slight. The Sloane Maternity Hospital and the Vanderbilt Clinic gave excellent opportunities, so far as they went, but they did not cover general hospital experience. In 1905, Dr. Lambert recommended the adoption of the English system of clinical clerkships whereby each student, during his course, actually lives and serves in a hospital for several months, and this system was adopted by the College four years later. It was appropriate historically that Columbia should take a leading position in this matter, for it was one of the professors of King's College, Samuel Bard, who first insisted that one of the necessary features of a school of medicine was a hospital in which medicine might be studied and taught, and, when the New York Hospital was organized in 1791, Bard was instrumental in having provision made for the medical students to attend its practice.

Public opinion, as President Butler has said, has moved rapidly during the past few years in regard to the interdependence of medical schools and hospitals. It is now pretty clear to all enlightened hospital managers that the mere care of the ill and suffering is only one-half of a hospital's business. The other half is to assist in the study of disease and in the better training of those upon whom is to devolve the responsibility for the prevention and cure of disease hereafter. In 1911 came to Columbia a new example of increased opportunity by a treaty of most far-reaching importance. Mr. Edward S. Harkness offered to provide the means for erecting upon the land of the Presbyterian Hospital a surgical pavilion, containing 150 beds, equipped with modern appliances and the laboratories for advanced research. He further offered to the Hospital, on behalf of an unnamed donor, money and securities estimated to be of a value of $1,300,000, the income to be used toward the support of the scientific and educational work connected with the Hospital. The University agreed to meet all the cost of carrying on the educational work of the

Hospital, provided that the income of the fund mentioned above should be applied to whatever extent might be necessary for this purpose. The University and the Hospital are to share the cost of operation and maintenance of the hospital buildings.

This plan should add greatly to the opportunities of students not only in medicine and surgery, but in the laboratory sciences of pathology, bacteriology, chemistry, and physiology. Both parties are moving cautiously in the development of this scheme, fraught as it is with tremendous possibilities for the future of medical education in the country. The professors of surgery, medicine, and pathology are, however, already in charge of their respective fields at the hospital, and all three are limiting their activities to teaching, to the treatment of patients in the hospital, and to research.

The new order at the College of Physicians and Surgeons, which it must be remembered is without endowment for general purposes, costs the trustees of the University more than one hundred thousand dollars a year. The increased entrance requirements, a raising of fees, and the uncertainty among the alumni of the old school as to the new plans, and as to the wisdom of advising young friends to register there, reduced the number of students from 809 in 1902 to 330 six years later. Since then the school has been growing steadily, though slowly, and now numbers 369. The graduates of 1913 brought the total number of alumni up to 7,843.

The College of Physicians and Surgeons seems destined to become in the future largely a finishing school. The costs for clinical instruction are so high and the opportunity for it depends so absolutely upon large populations that many of the smaller universities, and even a university as large as the University of Wisconsin, limit their medical work to the first two years, and are sending their students for the two final or clinical years to such institutions as Columbia. The number of students who go abroad to complete their medical education is likely to decrease. In the judgment of Dr. Lambert, the best medical schools in America are to-day better than are those of Germany in laboratory facilities and are rapidly becoming as good clinical schools as those of France and Great Britain.

William R. Ware, who was called to Columbia in 1881 to start a department of architecture under the School of Mines, had had fifteen years' experience as head of the School of Architecture of the Massachusetts Institute of Technology. He is grouped with Hunt and Richardson as one of the men who did most for American architecture during the dark days in the middle of the last century. Just as Professor Dwight was in himself the School of Law, so for many years was Professor Ware the School of Architecture. He was not only one of Columbia's most devoted and distinguished professors, but one of her most picturesque and lovable men.

✓ In his first report, Professor Ware pointed out the importance of creating for the work in architecture an atmosphere of its own, favorable to the harmonious development of its own students. Little by little he succeeded in loosing the bond which held architecture to the other departments in the School of Mines, and later carried this plan to the point of isolation from the general university interests. Under Professor Ware, and after his retirement in 1903, under his successor and pupil, Professor Hamlin, the historical and critical side of the architect's training was given first attention, although in later years more and more attention came to be given to design. Under the new director, Mr. Austin W. Lord, the field of architectural design is, it is clear to see, to have pre-eminence, and, since his appointment in 1912, the course of study has already been considerably modified to this end. The students take kindly to the new emphasis. Indeed, it has been found necessary to institute certain eligibility rules as to standing in other subjects, as a basis for entry in the competitions in design which have been borrowed from the Paris École des Beaux-Arts.

The school suffers from the presence of an academic bimetallism. Of the 143 students, less than one-third are candidates for an academic degree. Most of the others, admitted upon a comparatively low entrance standard, are working toward a non-committal certificate of proficiency.

In the university organization the School of Architecture is now in a somewhat anomalous position. With the department of music it was set apart, in 1906, as the nucleus of a Faculty of Fine Arts, but apart from the excellent work of Professor Dow in Teachers College, and of members of the classical departments in archæology, and some tentative steps toward landscape design, the other branches of the fine arts are not yet represented. This, however, is a condition which the trustees of the University and, indeed, the public at large cannot complacently regard as permanent.

Even before President Barnard's great service, Columbia, through its graduates, had had an important share in the development of the profession of education in America. Alexander Hamilton was largely instrumental in organizing the University of the State of New York.

To DeWitt Clinton we owe the founding of the free school system of the city, the initiation of the movement for the professional training of teachers, and the first legislation for the education of women. It was through another alumnus, Daniel B. Tompkins, that the foundation of the common school system of the State was laid.

Teachers College had its origin in the Industrial Education Association, formed in 1884, to give instruction in the elementary home economies and manual arts to children who were receiving no such guidance either in school or at home. It was soon found that the most effective way to accomplish these ends was to provide adequately trained teachers. As early as 1881 Barnard, it will be remembered, had proposed that " the science and art of education " be included in the Columbia curriculum. These two lines of endeavor coalesced in 1887 and the New York College for the Training of Teachers was incorporated, with Nicholas Murray Butler as its president.

As in the case of Barnard College, the new institution was built up at President Barnard's instance outside the University, with the definite hope of bringing it later into organic relations therewith. Before Professor Butler's retirement as president in 1891, an alliance was effected with Columbia, but the distance between the two institutions prevented any close co-operation. During the administration, 1891-97, of his successor, Dr. Walter L. Hervey, a charter was obtained and the name Teachers College adopted. A closer agreement was also made with Columbia, and to the original two years of professional training were added first one and then a second year of preparatory collegiate work, which were maintained until 1906. In 1894 the College moved to its

Teachers College, from the Green

present site. Since 1900, when under the agreement with the University already referred to the president of the University became its president and Professor James E. Russell was elected dean, the growth of Teachers College has been remarkable, both in resources and in numbers of students, particularly in students already holding a college degree.

By 1912, the two lines of work fostered from the first had become so fully developed, the student body so large, and the demands upon the College so diverse that the professional and the technical work were divided, and two schools—one of education, one of practical arts—were established, each under its own faculty. After 1914 the advanced professional work in education is to be upon a graduate basis.

The School of Practical Arts, to summarize a recent report of Dean Russell, offers to both men and women a program of study of four years, equivalent in standards of admission and graduation to the traditional college course. It includes in its program both general cultural subjects and a broad and generous technical training, based on adequate instruction in science or the arts, by which the student may get a high type of vocational training in industrial and household arts, dietetics, institutional work, public health, fine arts, the art industries, music, and physical training. In cooperation with the School of Education it prepares students as teachers in these fields. The school enjoys all the privileges of University membership, and its graduates receive the University degree of Bachelor of Science in Practical Arts.

The significance of this step can hardly be estimated at present. It may well be the beginning of a new type of collegiate education for women, one which sacrifices little of the traditional cultural element of the older liberal subjects and attaches special importance to those practical arts which determine the efficiency of domestic and industrial life.

From the same report of 1912 I take the following significant paragraph:

> " During the past fifteen years Teachers College has given instruction to some twenty-five thousand students. Of this number about thirty-three hundred have been graduated. Probably two thousand others will return later to finish their work. Such figures tell emphatically of the extent of Teachers College influence. Our students are at work in every state of the Union and in practically every country on the face of the globe. They occupy positions ranging from the kindergarten to the university and from assistant in the lowest grade to the headship of the educational system of our leading state. When one takes into account the youth of the institution—in 1898 the graduating class numbered twenty-nine and in 1912 it was six hundred—it must be clear that the maximum strength of the College will not be exerted for several years. Most of our graduates are still young; in ten years they will have advanced to more commanding positions. By that time we shall have ten thousand graduates in the field and probably forty thousand others who have had a partial course. Then we shall know whether Teachers College training is worth what it costs. No other institution has ever had such an opportunity. Judgment will be taken on the way we use it."

In 1887, Teachers College started the Horace Mann School, with sixty-four pupils, as a school of observation and practice. It is still used for observation, but it has become also a profitable investment for Teachers College. Incidentally it is the largest private school in the United States and one of the best. Nine-tenths of its graduates enter college. The school has outgrown the beautiful building provided for it by Mr. and Mrs. V. Everit Macy, and the high-school work for boys will shortly be moved to the property adjoining Van Cortlandt Park.

The Speyer School building, erected ten years ago by Mr. and Mrs. James Speyer, serves a double purpose. It is the school of demonstration and experimentation for Teachers College, and it is also a center for social and neighborhood work among the people of the district known as Manhattanville.

The relations of Teachers College, the Cinderella of the University, as it has been called, with the older parts of the University have not always been smooth. In no other profession was the necessity of the highest training for experts so long unrecognized as in teaching. Indeed, the first university chair in education was established hardly more than thirty years ago. When Teachers College came into the Columbia fold the word pedagogy was anathema to many of the older men, and the new school was none too warmly welcomed by them. To-day it is fully appreciated as perhaps the most vigorous and progressive part of the entire institution. The distinction of its faculty is recognized, as is its devotion to the College—in a single year seven of the head professors declined more lucrative positions elsewhere. So also is the service of the College in making the University known in fields which it would not otherwise touch. The boot at present is rather upon the other foot. Teachers College in the full flush of vigorous expansion has had, so to speak, no time to collect barnacles, and some of its members who have not forgotten the past sins of the University are inclined to look down with a condescension sometimes mixed with pity upon the older and more conservative faculties.

This, however, is but a passing phase, like the attitude of Canada toward England a decade ago, and the signs of its early disappearance are not wanting.

Although the New York College of Pharmacy is one of the youngest professional schools in the University system, it is historically next to the oldest. The movement among pharmacists that resulted in its foundation began in 1829, a charter being granted two years later. The College was for many years informally allied to Columbia through the common service of Professors John Torrey and Charles F. Chandler, and in 1904 it became part of the University on the same general terms of affiliation as Barnard College and Teachers College. Since the affiliation its standards for admission and graduation have been raised so that they are now the highest in the country for this particular profession, and its staff of instruction, originally strong, has been further strengthened by assignments from related University departments. There are now 441 students, of whom sixty-six are candidates for a University degree.

The school has been influential in the movement for higher professional standards in pharmacy. From its very beginning the instruction of undergraduates has been recognized as only one of its functions. The association of those engaged in the practice of pharmacy for the promotion of professional interests was provided for by its constitution and the first laws for regulating the quality of drug importations originated in a resolution adopted by this college, which was also largely instrumental in the organization of the American Pharmaceutical Association. A great element of strength to the school is the devoted service rendered to it from the first by the pharmacists as a body.

When the School of Political Science was organized in 1881, one of its stated purposes was the preparation of young men for the duties and responsibilities of public journalism. Only a few students, however, used the School for this purpose, and for many years it looked as though Columbia's sole relation to this calling was as a laboratory to provide subjects for New York's sensational journalism at its worst. I remember, for example, a lurid story about the University proctors spying through the keyholes and transoms of the dormitories to discover signs of undergraduate disorder. The only difficulty with this story was that at Columbia there are no proctors, and there are no keyholes and no transoms in the dormitory buildings.

In the year 1903, Mr. Joseph Pulitzer, who had already shown his interest in the University by the establishment of an important system of scholarships, gave the University one million dollars, which after his death in October, 1911, became available for the maintenance of a School of Journalism. A committee of professors shortly afterward reported a plan for the organization and conduct of the School, which was approved by an advisory board named by Mr. Pulitzer, consisting of a group of the most eminent and influential journalists of the United States. Dr. Talcott Williams of the Philadelphia *Press* was appointed Director and Professor J. W. Cunliffe of the University of Wisconsin, Associate Director. Not waiting for the construction of the building for which Mr. Pulitzer's will provided, 76 students presented themselves for instruction in September, 1912. The present registration is over one hundred.

Three notable facts as to this school have been pointed out. Mr. Pulitzer's gift is the largest sum ever set aside by any man for professional training in the calling to which he himself belonged. The School is the first to use a great city as its laboratories and the first school of journalism to be an integral part of a great university in a great city.

A second million is to be given to the University when the executors of Mr. Pulitzer's will are satisfied that for three years the School has been and then is in successful operation; and, after provision is made for handsome prizes to be given as a reward for conspicuous examples of public service throughout the country in journalistic, literary, and artistic endeavor, the remainder is to be added to the endowment of the School.

It is recognized that journalism properly covers the whole art of effective presentation in print and it should have as prominent a place in the modern curriculum as oratory had in the ancient. The sophists and rhetoricians of the day have audiences of millions in the newspapers and magazines, and the universities have been largely to blame that they lack the responsibility and training of an established profession. Columbia realizes, however, and the director has stated, that a school of journalism can no more make journalists than a law school can make lawyers, or a medical school can make physicians. All it can do is to give a man the knowledge that is useful to his calling, the training necessary to its practice, in such a way as to quicken genius and to awake talent. Journalism is an art, the art of expressing the progress of society for a day, and of uttering the will, the aspirations, the opinions, and the commands of the mass.

The University recognizes it as a grateful task to use its best endeavors to carry into fullest execution the noble project which Mr. Pulitzer conceived. Too much cannot be said in praise of the interest and devotion of the members of the advisory board, without whom this important undertaking would lack that helpful guidance which only a feeling of professional responsibility and a wisdom born of professional experience can give.

It was Mr. Pulitzer's desire that the privileges of the School be open to every student of marked ability who had had a high-school education, and for that reason the customary two years of preparatory collegiate study is not insisted upon. This is strongly urged, however, and a gratifying number of the students either have had college training elsewhere or are taking a combined college and professional course. The School is to-day the lustiest year-old academic infant in America. The students have taken up their work with enthusiasm and have added a valuable and picturesque element to the University life. The director and his staff have thrown themselves heart and soul into the new project and have already inaugurated valuable educational experiments, particularly in the closer correlation, or interlocking as they call it, of the different academic subjects of study.

When summer courses were inaugurated at Columbia in 1900, the work was regarded by our academic community at large as something outside of the real field of university operations, in no sense a vital part of the activity of the institution. It was supposed to be chiefly useful as an opportunity for ambitious teachers who had no chance of real university training to get a tolerable imitation of it for a few weeks in the year, and, on the other hand, as a means whereby impecunious junior officers of the University could make both ends meet. In a few years the status of summer work, from an experiment of doubtful intellectual and academic propriety, given reluctant house-room, changed to its present universally accepted position as one of the most thoroughly useful, creditable, and characteristic parts of the life of the University. Not only is the change amusing to those who believed in the Summer Session from the first, but it represents a very important fact in the history of the University.

Year by year the academic quality of the students has steadily improved, until at present practically half are qualified to become candidates for some University degree. Taking the figures of 1913, sixty-two per cent. of the total registration of 4,539 were teachers. The proportion of men to women was a little higher than two to three. The fact that nearly half the students have been members of some previous session, and many hundreds are also in residence during the winter, tends to bind the student body together from the opening. In general Summer Session students know what they want to do and how they want to do it, so that little time is lost in getting under way. Some details as to their incidental activities are given in a later chapter. The dominant note, however, is one of hard intellectual work.

The Summer Session is worth while for its own sake, and it is also worth while as a sort of fifth wheel for the whole complex academic vehicle. Educational slack of all kinds can be taken up in it without disturbing the winter programs. Students transferring from other institutions, for example, can clear up prerequisite subjects that would otherwise prove most troublesome. The havoc wrought by illness or too great devotion to extra-curricular matters can be repaired. From the faculty point of view, important educational experiments may be tried or new teachers given a chance to show what they can do. The future historian of Columbia will have many reasons for giving an important place to the first decade of the twentieth century, and not the least of these will be the development of the summer life, with its picturesqueness, its wide field of usefulness, and its solid foundation of scholarship.

As early as 1830, Columbia endeavored to extend her influence to those outside the academic walls. In 1885 the project was again taken up, and Saturday morning lectures were voluntarily given by members of the faculty. Mr. Low greatly extended the system of public lectures, making arrangements for them at Cooper Union and the museums, as well as at the University. From the beginnings of the Teachers College movement, also, an increasing amount of co-ordinated lecture work had been carried on outside the regular curriculum. The demands for increased academic training made by the City Board of Education in 1898 furnished a strong stimulus to these courses.

In 1904 this work in Extension Teaching was formally made part of the offering of the University, and in 1910 it was placed under the direction of Professor J. C. Egbert, to be administered in close co-ordination with the work of the Summer Session, of which he is also director. Three years later the two parts of the work were divided, Extension Teaching continuing to make provision for regular courses of standard duration and requirements, for which academic credit has been given since 1904, and an Institute of Arts and Sciences being founded to take charge of the briefer courses for which no formal credit could be granted, and to co-ordinate the system of lectures and recitals given throughout the University.

Most of the regular courses in Extension Teaching are now given at the University, subject to exactly the same standards which are required for the regular programme, the courses, however, being offered at hours convenient to those who cannot enjoy regular University residence. One-fifth of the extension students have satisfied the requirements for matriculation under some faculty and each year many transfer to regular membership in the University. The work has also been carried, with as yet no striking success, into Brooklyn, Newark, and other nearby centers, and even as far afield as Buffalo. The present registration is 2,754, to which should be added 1,152 students who are technically registered as members of special classes in Teachers College. Neither group is included in the totals of regular university registration. The teaching staff numbers more than one hundred and fifty instructors, including some of the most distinguished professors of the University.

Like the Summer Session, this work has an important function in maintaining the characteristic elasticity of the Columbia organization. It has practically removed from the undergraduate colleges the old bugbear of the special student, since all applicants of doubtful academic preparation are referred to the extension classes, from which they may be transferred after they have shown their proficiency. Many of the regular students pursue extension courses either in order to avoid conflicts in the regular program or to take up some special subject for which no provision is made there. For ten years the University maintained a special class of irregular and usually unsatisfactory students known as auditors. This class also has disappeared. The extension courses are more generous in their welcome of new subjects than the older departments and the program includes work in playwriting, in the psychology of advertising, and in optometry, as well as in frankly non-academic subjects, such as typewriting and stenography.

The only dangers in the rapid development of Extension Teaching to which the University seems exposed are first that of adulterating the student body with irregulars of a lower preparation, and secondly that of giving an opportunity to ambitious junior professors to carry an unduly heavy load at the expense not only of their health, but of their responsibilities to the regular faculties. These difficulties, however, can be overcome by careful administration, and the public service of the work to that large part of the community which cannot enjoy regular university training is hard to overestimate.

The Institute of Arts and Sciences has only just been opened, but it has the great advantage of having an excellent basis upon which to build in the hundreds of public lectures heretofore delivered each year at the University. Three hundred lectures and other forms of entertainment are to be offered during each season under the auspices of the Institute. Many of the best known professors have agreed to deliver courses of six or more lectures of the English University Extension type, and for musical productions the co-operation of the Philharmonic Orchestra, the Kneisel Quartet, and other organizations has been assured. An important feature of its activities, already well developed, is in choral singing, for which New York offers at present fewer opportunities than do many smaller cities. The plan is financed by an annual fee of ten dollars, which will admit the member free to lectures and the like, and at a reduced rate to professional performances. Already more than one thousand men and women have joined the Institute.

The teaching staff of the University for 1913-14 numbers 740, exclusive of clinical assistants and of those teaching only in the Summer Session or Extension classes. In the relations of these men and women to one another, there is a double pattern of organization. There is that of the faculties and boards, grouped around the University Council, which is representative of all faculties and "treaty powers." Particularly among the newer activities, small administrative boards have taken the place of faculties, partly because the council desires to retain a closer hold and partly lest in the multiplication of technical faculties the institution should become a polytechnicum, with the center of academic gravity no longer in the realm of advanced scholarship. On the other hand, there are the departments, a distinctly modern product—at Columbia they hardly existed before Mr. Low's time—which cut sharply across the faculty and corporate lines. While rather illogically they bear no organic relation to the council, they have nevertheless a powerful hold upon the institution through their important share in the preparation of the budget.

Dean Russell has pointed out the underlying interest of each unit of organization, that of the faculty in the student and his needs, that of the department in the development and rounding out of each subject of study itself. It is the frequent conflict of these interests which, for the present at any rate, make the double weave both vexatious and necessary.

There are two general schools of thought as to university organization at Columbia; one, of which Professor Burgess has long been the leader, lays emphasis on the individual professor and the faculty, while the other, until very recently the more generally followed, emphasizes the department as the dominating unit. On this point President Butler has said:

> "When the University was in the state of reorganization and reconstruction, the faculties, as such, had a good deal of business at every session. They were framing new conceptions of their work, new regulations for guidance, new conceptions of their inter-dependency with other parts of the institution, and the meetings were long and animated and interesting. After the framework was made and operated successfully for a period of years, and had been amended as need arose, then the faculties, as such, found themselves left with only more or less routine work to do, passing on sometimes very formally and in a routine way the recommendations of the departments. Much of this routine is now in the hands of committees.
>
> "What appears to me to be going on with us, although others might not agree with this diagnosis, is the attrition of the faculties between the council above and the departments below, and I should not be at all surprised if twenty years from now, or probably in less time, the faculties, which are really a survival from the middle ages, should practically disappear. This is not because anybody desires it to be so, not because it is the policy of any official or board, but because it is the law of academic gravitation."

The fulfillment of this prophecy seems likely to be postponed at any rate, by a recent vote of the University Council, which looks toward formal recommendations by the faculties as such with regard to the budget. These are not to supplant the departmental recommendations, but to supplement them. Any control over the purse strings, however, even indirect control, is certain to enhance the power of the faculties.

In all the professional schools, moreover, one fundamental faculty service still remains to be completed, and that is a careful simplification of the courses leading to the professional degrees. These courses in America, it must be remembered, developed from the apprenticeship system, and for this reason and from departmental enthusiasms they have in the course of time become overloaded with minute and non-essential details, from which they are only just beginning to be freed.

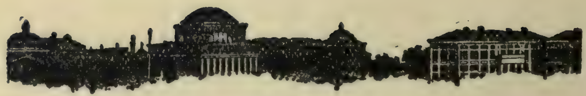
In addition to the original faculty of the College, the faculties and boards in the order of their establishment are as follows: Law, Medicine, Applied Science, Political Science, Philosophy, Pure Science; Barnard College, Teachers College (divided in 1912 into Education and Practical Arts), Pharmacy, Fine Arts. The last named is about to be discontinued for the present. There are Administrative Boards for the Summer Session, Extension Teaching, Agriculture, Journalism, and Architecture.

Many professors sit in more than one faculty, some in as many as four. In some cases the faculty has grown very unwieldy, containing more than fifty men. The strength and usefulness of any faculty depends upon a comparatively restricted field and a community of intellectual interest. Where these are lacking, little can be accomplished. It is for this reason that Teachers College has recently budded off a Faculty of Practical Arts from its original Faculty of Education.

The statutes recognize fifty-four departments of instruction. For certain administrative purposes these are grouped into sixteen divisions. While in some cases the divisional organization is a real and useful one, in general the division at Columbia has never taken the important place in the scheme of things that it has, for example, at Harvard. Excepting education, which may be regarded as a school, a faculty, a division, or a department, according to the point of view of the observer, the largest departments, as judged by student registration, are English, physical education, chemistry, physics, and history, each of which registers annually more than six hundred students. Six other departments have each more than four hundred students. No fewer than thirty of the departments have an annual appropriation for maintenance greater than was the entire income of the institution as late as 1823. The larger departments have more members than the entire faculty of many a good small college.

In general, each department has descended from some professorial "chair." The strong professors grouped their disciples about them as assistants, and for this reason the original form of organization was a military one, with the senior professor in supreme command. Little by little, with the calling of men of maturity and distinction in different fields to the University, this has broken down and the best departments are usually upon a democratic basis, the details of administration being often carried on by one of the younger professors. Where the department is still upon the military basis, the professors and instructors of Teachers College and the other treaty powers are likely to maintain only a nominal relationship with their colleagues. Where it is democratic, the corporate lines are drawn far less tightly. There is a tendency at present toward a merging of the smaller departments which, usually for accidental reasons, have grown up independently into larger and stronger units.

With all of its evident elements of strength, the departmental system has one definite weakness, and that for a very human reason. Professors are likely to believe firmly that their subjects or their departments are of greater relative importance than is really the case, otherwise they might well have chosen some other field for their life work. Now beyond a certain point the development of any field is at the expense of the institution as a whole, and the over-developments that have come about primarily from human rivalry between departments constitute not the least important reason for the low level of academic salaries here and elsewhere to-day. The new plan of faculty budgets has been devised primarily with a view to checking such over-developments for the future.



TEACHERS AND EXECUTIVES

The Personal Equation. Complexity and Diversity. Social Relations. Economic Factors. A Working Community. Professors and Students. Publication. Teaching. In Memoriam. Earlier Men. Anthon, Drisler, Van Amringe. The Presidents.

A UNIVERSITY is made not by situation, by money, or by machinery, but by men. " The greatness of a university,"—I am quoting from an address by Professor H. T. Peck,—" however stimulated and inspired, does not depend first of all on bricks and mortar, upon well-ordered curriculum, and upon the material equipment, books, the apparatus, and the smoothness of the administrative machinery. It depends in its last analysis on the men who do the work, who guide and excite and stir the minds of those who carry away, in the end, a far less vivid impression of their studies than of the personal influence of their instructors."

And it is worth while for those outside of academic life to know something of such men, for, as President Butler not long ago said: " It is the dreamer of dreams, the poet, the prophet, the man of letters, the man of science, who has the world in his hands to-day and has always had it. He is the man who sets free the forces, who sets in motion the tendencies, who gives expression to the ideas, which seize hold of and mold the people."

It is not easy to picture adequately the dead or the living, the present or the absent. Our academic body was indeed reminded at a recent " family dinner " that the established convention, that nothing but good shall be spoken of the dead, finds its complement in that other convention upon which we are more accustomed to act, that nothing good shall be spoken of the living. It is not even easy to classify our human material, for the same man, it often happens, is worthy of note as undergraduate, alumnus, teacher, administrator, and trustee.

The ramification of the modern faculties and departments from the original " chairs " forms an interesting subject of investigation. Less than fifty years ago, the erudite Scotchman, Nairne, was supposed to cover a field which is now occupied by more than forty professorships. There is, however, nothing in this ramification that is peculiarly typical of Columbia. Our academic titles, as a final difficulty, lack the piquancy of the British nomenclature. I can give, for instance, nothing to correspond with the recent official announcement from Oxford that Mr. So-and-so, Wilde Reader in Mental Philosophy, has become an Extraordinary Fellow of Corpus.

Of the men and women who are assistant, associate, and full professors, the average age is forty-six years. They have held professorial rank at Columbia for an average of seven years. Seventy have earned the Ph.D. degree in course. Two hundred and thirty-four give presumably their whole time to the University; at any rate, their service elsewhere is incidental. Forty-eight professors, thirty-two of these physicians, frankly divide their time between university and other interests.

The aggregate number of changes (appointments, promotions, and the like) of 1912-13 in the teaching and administrative staff was 136. The changes since Mr. Low's inauguration in 1890 make a total of 2,460.

From the very first a notable characteristic of the

Columbia staff has been the wide diversity of academic provenance. In King's College, Johnson was from Yale, Cutting from Eton and Cambridge, Treadwell from Harvard, Harper from Glasgow, Cooper from Oxford. The original medical school was mainly under Edinburgh influence, but Leyden and London and Paris had their share. Of our own alumni, the first to receive a professorial appointment was Vardill, in 1773. Early in the nineteenth century there was a period of inbreeding, and for some years Columbia College was in charge of a faculty composed wholly of its own alumni. Later came a notable group of West Point men: Davies, Hackley, Vinton, Peck, Trowbridge. After 1857, Nairne represented Scotch scholarship; Lieber, and later Chandler and Burgess, the German ideals of education; Egleston the brilliant qualities of French scientific training. Burgess was the first of a distinguished and strikingly large group of Amherst men, most of them disciples in his own field of political science.

Due, I think, to Barnard's stimulating influence and to his establishment of alumni fellowships, a striking proportion of the men who graduated from Columbia during his administration entered academic life. A few went elsewhere, notably Ashmore to Union, Hopkins to Yale, and Ely to Wisconsin, but the majority remained at Columbia. Of these there are now in service as full professors, twenty-six men.

Under Mr. Low not only did men like Brander Matthews, Crocker, and MacDowell come into academic life, but Columbia robbed her sisters elsewhere right and left. Osborn and Sloane were called from Princeton; Keener, Cohn, and Burr from Harvard; Robinson and Cattell from Pennsylvania, to be followed in the next administration by Seager and Devine and Lindsay. Our worst robberies, however, have been due to the well-deserved reputation acquired by Miss Thomas for her skill in picking promising academic material—Wilson, Giddings, Lee, Earle, Lodge, and Morgan were all called from Bryn Mawr. The newer institutions west of the Alleghanies are to-day promising fields for plunder. John Dewey, and later Alexander Smith, came from Chicago; Abbott and Suzzallo from Leland Stanford; Harper and Cunliffe from Wisconsin. Some of our own alumni have recently returned either from professional life, like Walker and Slichter to the Engineering School and Stone to the Law School; or like Baldwin, Burnside, and Zinsser from professorships elsewhere. With the new spirit in the Medical School, the old policy of taking none but its own graduates into service has passed, and men have recently been called from Johns Hopkins, Cornell, Pennsylvania, and Chicago.

To return to the question of degrees, an analysis made a year or so ago showed that more than two-thirds of the professors received the first degree from some other institution. Among 267 professors, 78 institutions were represented by one or more graduates. Seventy-five first degrees were from Columbia, 25 from Harvard, 19 from Yale, 13 from Amherst, 10 from Princeton, 9 from the College of the City of New York, 5 each from Williams and Toronto, and 4 from Johns Hopkins. The faculties include 13 who hold the degree of doctor of philosophy from Johns Hopkins, 9 from Harvard, 24 from other American universities, and 22 from foreign institutions.

A community so large is necessarily composed of all sorts and conditions. Our collection includes every known type of professor. We have the faithful stay-at-home, who boasted that he had never missed an academic exercise in eighteen years ('' What a barren existence! ''

was the president's comment), and we have the men who are always going away to the ends of the earth—Jackson to Persia and India, Shepherd to South America, Crampton to Polynesia. All our anthropologists have been initiated into remote Indian tribes.

We have men of simplicity and modesty, and these include our most distinguished; and we have a few sufferers from *la folie des grandeurs.* There are those who try to do everything, even the minutest details, themselves and those who turn over everything, even matters of constructive policy, to the first-comer. The man who is insolvent at the end of the month works cheek by jowl with the man of wealth. An engineering expert once complained to me that to be a professor was a luxury which cost him some fifty dollars a day.

Our men are shortsighted and far-seeing, legal-minded and anarchistic. We have men of startling views on all subjects. Some proclaim them from the house-tops; others, equally courageous, do not. An excellent comment on this particular aspect of academic freedom was not long ago printed in the *Quarterly:* "A professor will not always wish to teach everything that he privately believes to be true—not because he is afraid, but because he is modest. There is such a thing as an intellectual discretion which has nothing to do with theory. Just in proportion as he is permeated with the scientific spirit, he will know that human institutions do not follow a law of logic; that opinions are in constant flux, and that all social opinions have their historical justification. . . . He will even count on the possibility of himself changing his mind."

Every academic community, including our own, has its share of men who through age or illness, often through overwork, have lost their grip, whose flames have burned out. Sometimes, indeed, the flame was never more than an *ignis fatuus.* It is, however, less true today than when it was written, that there is no profession where failure to pull one's own weight can go so long undiscovered as in teaching. Even in these days of Carnegie pensions, permanence of tenure, that fundamental asset of the teacher's career, involves necessarily the presence of dead wood; and our trustees have learned, after some costly and painful experiments, that it is better in many cases to pay an additional salary and work around an academic obstruction than forcibly to remove it.

It was not until Mr. Low's time that the faculty as a social unit came into being. In the early days the trustees were solicitous as to the souls of the professors; at any rate, the president was instructed in 1846 to report their attendance on daily prayers; and as late as 1877 their duties as teachers were specified in the minutest detail. Otherwise the records show nothing regarding the professors as a group, although as individuals they received appropriate consideration. The first informal gathering of the professors as a body was in Mr. Low's house in March, 1890, to discuss general problems of organization. Of the thirty-four men then gathered together but three are now in teaching service. The new spirit promptly made itself felt through the establishment of retiring allowances and arrangements for sabbatical leave of absence.

University teas and faculty receptions were later established and the President's House, recently finished, is designed primarily as a social center for the university community. In 1906 one of the older buildings at Morningside, with no little charm of a mid-Victorian kind, was made into a Faculty Club. This has to-day become one of the most vital forces in the institution. It has been possible to keep the scale of things much simpler than in similar clubs elsewhere, with the result that the membership includes practically all the University men, including those in the lowest ranks. Our neighbors from the Seminary, the Hospital, and the Cathedral are also welcome. The fact that one hundred and fifty men take luncheon together every day makes the club a potent influence against intellectual isolation and departmental provincialism. It is a great place for the crossing of intellectual wires and, thanks to its existence, ideas are no longer carried from classroom to classroom, " if at all, subterraneously by students, as the plague is carried from house to house by rats." The mathematicians and philosophers, for example, have been conducting here an intellectual flirtation of several years' duration. There is also a club within the club—the Every Other Saturday (which meets on alternate Wednesdays).

It is an eminently free-speaking community. If, as Professor Keyser has pointed out, your man of letters or student of linguistics describes his colleague of the laboratory as a sublimated tinker, the latter may with equal amiability respond by a reference to a philological rodent who spends his days gnawing at the root of a verb. After luncheon every day there are a number of games of chess, for chess, followed by tennis and handball, is the leading faculty sport. In the evenings are held the informal faculty dinners, which are proving a much more effective means of getting things done wisely than the formal meetings with gavel and ballot box in the Trustees' Room. So also are the meetings of the departmental clubs.

The women of the University have recently organized their own Faculty Club, which has its own headquarters and is growing rapidly.

The *University Quarterly* deserves mention as a faculty organ, for perhaps its chief service is as an interpreter of the members of the staff to one another. Anything that a professor may write in its pages is carefully read by hundreds of his colleagues, and the policy of devoting a special issue to the work of some particular branch of the institution enables the men in other parts to practice at home the art of being well informed.

The economic problems of the professor are acute, here as elsewhere. Professor Clark has pointed out that teachers are hired in order that their services may be largely given away. They bring a great deal of wealth into existence, but not in a way that enables them to get much of it under their control and collect the pay for it. The teacher's only economic hold is that he must be lured into teaching from some other possible occupation. As indeed Professor J. J. Thompson once told us at Commencement, it is not possible for even the purest scientist to live on nothing. The Columbia professors probably regard their poverty as more grinding than that of their contemporaries in smaller centers, on account of the higher cost of living in the city, plus, if they be honest, the greater opportunities for the pleasant expenditure of money in the fields that lie between necessity and luxury. On the other hand, they have, to say nothing of the opportunities for earning money, one great asset. In a great city there are quite as many different standards of living as there are professorships, and there is no inconvenient norm to which all must conform. If a man wishes to live his home life without reference to that of his colleagues, he can be swallowed up by the city as effectually as by a quicksand. Indeed, it is one charm of our social relations with one another that, unlike that of the army post or the small college town, they are not inevitable but voluntary.

It may be of some comfort to the Columbia teacher to know that, of the twenty-one other institutions in the Association of American Universities, none expends within $300,000 as much as does Columbia for teachers' salaries annually, and in only two cases is a larger proportion of the total expense of the university devoted to this purpose.

A faculty apartment house is greatly needed, for by the irony of fate the very work that the professors of Columbia have done to increase the prestige of the University is compelling them to move farther and farther from her doors. The charms of living in the university environment are attracting numbers of persons in comfortable circumstances to its vicinity, thereby raising the rents of nearby apartment houses to a figure that is prohibitive to all but the most favored of the University officers.

The faculty as a whole are rather notably a hard-working lot, both because they have to and because they like it. The general administration does its best to lighten routine chores. The trustees realize that the professor is the goose that lays the golden egg (we have to thank the New York *Evening Post* for the metaphor), and that there is no better way to kill the animal intellectually than by overfeeding with trivial tasks. Practically every married man, without private means, has however to add to his income by outside work, and very few are willing to rest on their laurels as to scholarship and production. Columbia is probably no better and no worse than other American universities in the matter of overloading her men. As to whether this overloading is a serious menace one can get an authoritative opinion on either side. One of our optimistic professors says that the fortunate combination of teaching and research, so peculiarly American, makes the life of the university instructor a happy one, and it will in time have a wholesome effect upon our learning. On the other hand, a distinguished visitor, Professor Bjerknes, recently assured us that, if he had been required to do as much teaching and administrative work as we do, he would never have been invited to lecture here in a difficult branch of science. At any rate, the atmosphere of hard work and the broader interests of the large city free our men from petty jealousies and controversies. To quote Dr. Slosson once more: "The Columbia professors do not worry themselves or worry each other as they are apt to do in smaller faculty communities. . . . Conservative and radical, orthodox and heterodox, commingle without self-consciousness, and each man views the eccentricity of his colleague with a colorless or indifferent eye. In criticising the ideals or the actions of another he does not resort to a whisper or a roar, but uses the same tone of voice as though he were expressing an unfavorable opinion of the weather."

On the other hand, our men are not too busy to arrange dinners or prepare *Festschriften* in honor of colleagues who have passed some milestone of academic service. Not a year passes without one or more such tributes. Perhaps the most interesting was the publication in 1908 of a volume of essays by Columbia men in honor of a Harvard professor, William James. Of the nineteen essays, eight were by former pupils of James now in the Columbia faculties. Last year we all gathered in the Faculty Club to bid Professor Goodnow

Godspeed before he left for Pekin to take up the duties of Constitutional Adviser to the Chinese Republic.

We are not, alas, without our academic intolerances and we have suffered from them. Teachers College, now that she is powerful and prosperous, would be easier to get along with if, when she entered the University a dozen years ago, some of the members of the older faculties had been more willing to regard pedagogy as a socially respectable calling. Speaking broadly, the men in the natural sciences and their applications are now in the saddle and are rather prone to look down upon their less fortunate colleagues, just as the classicists did not so long ago, and as, unless signs fail, the men in the social, or as Professor Cattell calls them the " unnatural sciences " will be doing before many years.

In no respect has there been a greater change between the old and the new Columbia than in the relations between faculty and students. In the old days a great gulf was fixed; to-day there is practically no line drawn between the two. Even in the late seventies the student editorials laid all undergraduate troubles at the door of faculty exclusiveness and aloofness, and, when Professor Merriam established an informal volunteer class in Greek, the event was striking enough to be signalized by a resolution of appreciation from the trustees. The individual professors who were willing to descend from Olympus stood out sharply. The extraordinary popularity among the alumni of Van Amringe and Chandler was due primarily to their endeavor to understand the point of view of these same men when they were students. By trying to look at things through the student's eyes they saw his difficulties and were better able to help him in their solution. Professor " Billy " Peck was humanly interested in his students. So also were Ware, Boyesen, and Sprague Smith. So doubtless were others, but it was not until the coming of the men whom President Low gathered about him that this became the rule rather than the exception, and Columbia grew to be, in Newman's phrase, a real Alma Mater, knowing her children one by one, not a foundry or a mint or a treadmill.

One very important feature in the relations between officers and students is brought about by the high rentals in New York City. Because of these, practically none of the professors can afford to have studies at home, and they spend nearly all of their working hours at the University. It has since Barnard's time been the policy of the trustees to make provision for the independent work of its officers on the grounds, and every professor has his own office. As a result the student can almost always find the professor when he wants him. This may and does involve considerable interruption to the professor, hardly more perhaps than he would have in his own home, but it means on the other hand a very great privilege to the students who are interested in their work.

In its different parts there are many things at the University to bring officers and students naturally together: the honors work in the College, the preparation of dissertations and seminar papers for graduate students, the architectural ateliers, the geological and engineering trips, the various aspects of social and religious work. And this does not benefit the student alone. The chance to multiply one's efficiency by the aid of a devoted band of able young disciples is no doubt part of the drawing power of the great universities. Dr. Keen calls students the best whips and spurs that he knows, and one of our younger men has pointed out that the undergraduate, intensely interested as he is in everything about him, knows life crudely perhaps, but clearly. He has curiosity in a high degree. He is worldly wise. He has something to give the instructor as well as to receive. Another says that both students and teachers of Columbia care most for the scholarship that is productive, and their relation is probably to a higher degree that of collaboration than at any other institution in the United States.

Without losing in dignity, the professors take care that they do not grow away from the students. One professor whose college diploma was signed more than twenty years ago can and does beat the best of the undergraduates at tennis, another in fencing. For more than a decade there has been a faculty-senior baseball game at Commencement, and the faculty has usually won. There are also matches in golf and chess. One professor from the goodness of his heart coaches the debating team, another the Elizabethan plays. Following the example set by Professor Woodberry in King's Crown and Professor Pellew in the Chemical Society, many men give much of their time to the work of different departmental societies.

The need of these personal relations is officially recognized in a system of faculty advisers in the undergraduate schools. To speak frankly, these formal schemes, though they have their place as a sort of official insurance that no student will be overlooked, are less successful than are the more informal relations. One adviser recently confessed that, while the students show their delightful tolerance for all the mysterious—and to them often whimsical—projects of their elders, the only advice they want or are willing to take is semi-legal advice in the technical method of getting around some inconvenient University regulation. This, however, is perhaps as it should be.

The Columbia faculty is a producing community and it is less affected than is commonly the case by the current claptrap as to the capricious sanctity of research. By this I do not mean that the importance of the discovery of new truth and the responsibility of the universities to the world for such discoveries are not appreciated by our professors. They realize, however, that, barring exceptions at the extremes, the distinction between research and so-called hack or commercial work is mainly one of attitude. In the words of one of the world's most distinguished contributors to pure science, Professor E. B. Wilson, the aim of a Lister or a Pasteur is not less lofty than that of a Darwin or a Lyell; what counts is the spirit in which the work is done. The men do what their hands find to do, and do it with their might. The fact that Pupin's researches upon the conservation of electric current made him a wealthy man does not detract from their scientific value, nor should we think the less of the assistant in our botanical laboratory because he stumbled, while testing grain seeds, upon a new and profitable breakfast food. At the Medical School the work of our clinicians is no less scholarly because it will save many human lives, and is no more and no less appreciated as science than are the researches in the less practical field of comparative anatomy. The men in Teachers College are particularly fortunate in combining sound scholarship and immediate usefulness. The lessons of our children will be freed from much unnecessary drudgery through Lodge's vocabulary of all the Latin words that one will ever have need to look up, and Smith's sensible mathematical tests. Monroe's Cyclopedia of Education and the collections of original documents being made by Giddings and Shotwell may be called hack work, if you like, but it does not lessen their value. In the vigorous and, to us, rather un-British advertising of the new Encyclopedia Britannica we are by no means humiliated in finding the names and counterfeit presentments of so many of our colleagues.

Not the least useful part of our recent production has been in family lectures, where the men in different fields of science and letters get up and describe to their colleagues, in terms as simple as possible, the work to which they are devoting their lives, and explain why it is worth while. Three volumes of these lectures have recently been published by the University Press.

The common or garden text-book is judged upon its real merits by the writer's colleagues, and not only financial return but academic honor came in the past from Anthon's editions and Davies' Legendre. These books, we are proud to remember, first introduced into the United States the fruits of German classical and archæological scholarship and the then new French mathematics. It comes to-day, to name only a few among many, from the collections of cases made by Keener and Burdick, from the engineering text-books of Burr and Crocker, from Robinson and Beard's histories, and McMurry's or Dodge's geographies.

Nor is the editor without honor in his own country. How President Butler finds time with his countless other duties to conduct the *Educational Review* no one knows, but the fact that he does is appreciated, as is Munroe Smith's work for the *Political Science Quarterly,* Todd's for the *Romanic Review,* and Tombo's for the *University Quarterly.* Cattell's brilliant editorship of *Science* and the *Popular Science Monthly,* even when he uses them to tell us our sins of omission and commission as a university, and possibly because of this use, endears him to us all. He himself is a living proof that we have *some* academic freedom, at any rate.

The University Bibliography is printed each year and gives thirty or more closely printed pages to the individual contributions of officers. Of course some of these records are padded—there is one case of a man whose mere list of titles for a single year covered nearly four pages—but the record as a whole is one of which the University may well be proud. The fact that each year several publications by our colleagues are translated into foreign languages, Oriental as well as European, is particularly pleasant. It is refreshing to see how reluctant our academic cobblers are to stick to their lasts. We find engineers, architects, and psychiatrists writing poetry, a zoölogist who writes authoritatively on mediæval armor, a classicist on current American politics, an experimental psychologist on radical democracy, a mathematician discussing Swedenborg.

A man need not find his way into print to be appreciated by his colleagues. It is recognized that the product of the deep scholarship of some men, like the late Professor Price, is to be found in the scholarship of younger men who sat at their feet rather than in books. Others give their energies largely to the upbuilding of departmental equipment. The really excellent laboratory equipment in mining is mainly home-made, and this, by the way, is true to the traditions of our School of Mines, for in its early struggles the professors drew the plans and superintended the work for the first laboratory. Professor Curtis has given useful years to the collection and preparation of samples of our local trees, and the Chandler Chemical Museum will be a permanent and fitting memorial to the man who gathered its contents together.

For a time it looked as though these multitudinous activities were crowding out, or turning over to beginners, the more prosaic duties of undergraduate teaching, but the pendulum is swinging to-day in the other direction, and the words of Solomon, although addressed to the student rather than to the teacher, express fairly enough the present attitude of our faculties: " Take fast hold of instruction, let her not go; keep her, for she is thy life." In official words: " We are trying by increasing the compensation of the undergraduate teachers, by adding to their dignity and prestige in various ways, to make it clear that we put as high a value upon first-class teaching as we do upon research and investigation. We hold that the two things are different, but we hesitate to subordinate either to the other." Appointments to the undergraduate faculties are now of short tenure, to the end that the men who actually control the College will always be the men who do the college work. In the Report of 1857 I came upon the following characteristic pronouncement of Lieber's: " A good and true teacher ought to possess the solar quality of shedding light, and warmth-evoking light." The relation of the great teacher to the great investigator has been well compared to that between the great musical performer and the composer.

The College has come to recognize a real danger in the careless appointment of young men to be tried out on the undergraduate. In the first place, if he is not good enough to be called elsewhere and does not die or commit a crime, the chances are excellent for good-natured promotion as the years go on, until such a man is moved up to a position where his mediocrity becomes painfully evident, not as at first to the undergraduate only, but to the entire academic community. In the opinion of one of our men, who is deliberately giving his life to undergraduate teaching in the face of blandishments from his colleagues in the graduate schools, it is not only as dangerous to start a thousand-dollar man in the College as in the University, but the almost unvarying practice based on the contrary assumption has done much to lower the dignity of college teaching and make promotions seem always from undergraduate to graduate instruction.

Our community has a pretty shrewd idea as to who are its strong men, though they may not make the longest speeches in faculty meetings or be pictured in the popular magazines. When promotions are announced, we sometimes think that we know better even than the trustees, but on the whole the judgment of our overlords corresponds pretty closely with our own.

The close life of the University has its hard side when the ranks are broken by death:

"But yesterday we saw him face to face,
Colleague and comrade, gentle, modest, wise;
In vain to-day in his accustomed place,
We wait to win a welcome from his eyes."

It is hard even when the one who has gone has enjoyed long years of distinguished service, as did Rood and Price. It is harder when, like Boyesen and Merriam and Mayo-Smith and Canfield, they had barely passed the zenith of their useful careers. It is hardest of all when they are struck down in early life, with the future shining bright before them. In my own experience of a dozen years, Columbia has lost Tufts and Townsend, brilliant physicists; Earle and Olcott, classical scholars of distinction; Tucker and Carmalt, Hiss and Herter, from the front ranks of the Medical School. One of our finest academic addresses was Herter's on " Idealism in Medicine." It was of Miller, as a student a famous intercollegiate athlete, and as a teacher and investigator a tower of strength in the School of Chemistry, that Frank Dempster Sherman wrote the lines quoted above. MacDowell's fatal illness was peculiarly tragic. He was recognized in the University as a man not only of genius, but of rare and beautiful character. The circumstances of his leaving its service first revealed the nature and progress of this illness and his breakdown filled every member of our academic community with the sincerest sorrow. The Union Seminary has recently lost two strong men, President Hall and Professor G. W. Knox, who had made themselves dear to the University community. Knox in particular had voluntarily conducted a college course in religion, which brought him the esteem and affection of the undergraduates and their teachers.

No loss, however, came so close to many of us as that of George Rice Carpenter, whose simplicity and modesty of character disguised, until the appraisal that comes with death, the fact that he had been not alone the most lovable of companions, the most helpful of friends to students and colleagues alike, but also one of the most powerful forces in making Columbia what she is to-day. " No one could be more patient than he. He achieved his end by no rapid flight, but by overcoming barriers one by one, quietly, systematically, carefully, without loss of energy and with wonderful self-control. Few minds have united more method with more eagerness than his. His firmness accomplished much. His courtesy, humor, and tact were alike unfailing and marvelous.'' A memorial of the kind which he himself would have approved has been erected by his friends in the George Rice Carpenter Library of the Department of English.

As one looks back it seems as though Columbia has had almost more than her share not only of distinguished but of picturesque personalities. There are, I may say in passing, men as picturesque in the faculties to-day, but for one of their colleagues to call attention to such picturesqueness might give rise to misunderstanding. We know, for example, that one professor, who shall be nameless, arbitrarily passed certain " oldest living undergraduates " after repeated failures, upon the students' word of honor that they would never attempt to practice their profession. Another case is that of the assistant who was called upon to conduct a minor graduate course because the professor was absent on leave, and who formally enrolled himself as one of his own pupils, and at the conclusion of the course claimed credit for it toward the doctor's degree.

The men who stand out in the memory of the old boys were not all professors. To the students Stephen Weeks—janitor, assistant librarian, proctor—was for years about all that represented devolved authority. His sympathies, I fear, were often on the side of the offender. In those days, for example, no one might smoke on the College grounds. In administering the law, Weeks would call the culprit, whom of course he knew perfectly well—for in those days there were not seven thousand nor seven hundred students—and, producing a memorandum book, would say, " Mr. So-and-so " (I must not be more specific, for my informant is now a trustee), " Mr. So-and-so, you are smoking; please give me your name "; and he would solemnly write down " John Doe " or whatever the inventive student was pleased to tell him.

" Dean " Singer in my day held court in a janitorial cubby-hole in the entrance to the Forty-ninth Street Hamilton Hall, and used indeed to perform certain unofficial but essentially diaconal functions. The new site gave to the University the services of a dear old Scotchman named Spencer, who, thinking of the old Bloomingdale days, always referred to the students as " the inmates." At the Medical School, Boag, a Confederate veteran, matriculated more than five thousand doctors in his forty-one years of service, and remembered them all when they came back to the " P. & S." George Fisher, a whaler whom Chandler had brought from New Bedford, and who rose to the position of University bursar, holds, particularly in the hearts of the School of Mines graduates, a similar place.

Our list of professorships and the titles of our fellowships, museums, and the like carry back our thoughts, as it was intended they should, to the men of former years, and it is pleasant to study in detail these bonds between the past and the present. Janeway's professorship in the practice of medicine, for example, takes us back to John Bard, Huguenot in race and Royalist in politics, and the beloved physician of George Washington. Seligman, himself a member of a famous family of bankers, harks back to McVickar, who formulated the principles on which our national banking system rests, and who served as professor for forty-seven years—may Seligman serve as long! From the many-sided Chandler we look back to the many-sided Mitchill, who as a professor was the first in America to attack the sanctity of phlogiston, and later as United States Senator was largely responsible for the Lewis and Clark expedition. In mathematics Keyser is linked to Adrain, who fought as a boy in the Irish Rebellion, and who was prominent in his day in mathematical scholarship and as an inspirer of scholarship in his students, notably Professors Anderson and Renwick. Renwick's son, by the way, born on the old College grounds, was at the time of his death, a year or so ago, the oldest Columbia alumnus.

The appointment recently of Harper to the Torrey Professorship reminds us of the curious reason why John Torrey became one of the really great American scientists. His father was a prison-keeper, and it was when the botanist Eaton was incarcerated for debt that the boy became first interested in nature. Dunning's chair takes us back to Lieber, the friend of Humboldt. His academic and public services have been dealt with elsewhere, but not his very human personality and particularly his innocent vanity. One of our alumni has now a photograph of the old man stripped to the waist, which had been taken lest the lines of his magnificent torso, providentally spared at Waterloo, should be lost to posterity.

Rood's degree was held back for a half century because he upset the life of a venerable neighbor by piercing the dial of the college clock with an arrow. When the degree came it was an honorary one, conferred at the Yale Bi-centennial. Rood extended help to Merriam and other colleagues here by his ingenious electrotypes of ancient gems. As an artist he was clever enough to fake an antique which fooled the sharpest of them. It is amusing to remember that he became an unwilling apostle of French impressionism, when Claude Monet discovered and devoured a translation of his book on chromatics. Rood's predecessor, McCulloh, for a time under an official cloud because, obeying the dictates of his conscience, he fought for his native South in the Civil War, is now remembered as a man of great power and of vivid personality.

The *obiter dicta* of Egleston, who, although the distinguished founder of the School of Mines, was known to the irreverent as "Tommy Rocks," and those of Short, known as "Saw-my-leg-off" Short, were secretly printed and may be found by the curious in the Columbiana collection of the library.

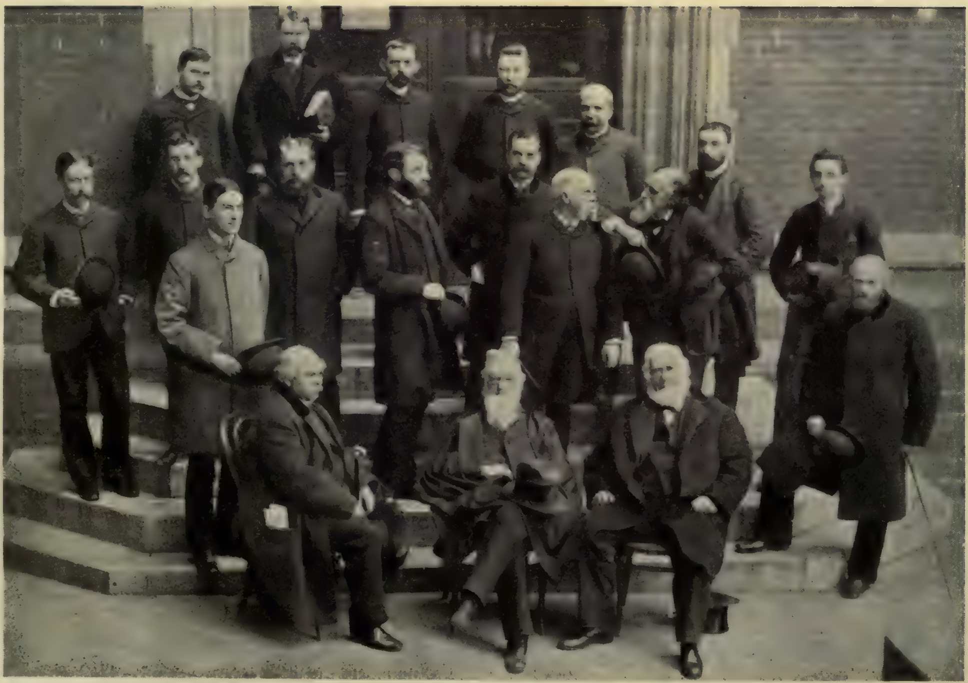
The Medical School has always had its men of mark. Following Bard and Mitchill, to name but a few, came Parker, Clark, and Dalton, the first American who gave up medical practice for teaching and research; and later, Stephens, Delafield, McBurney, Jacobi, and Bull. McLane as professor, president, and, after the merger, dean, was a natural leader, and that, during the last ten years of his life, he was out of sympathy with the school he did so much to build up, is a source of great regret to his old colleagues.

Dwight *was* the Law School for thirty years. His successor, Keener, was almost an equally commanding figure, but the methods of the two men were diametrically opposed. Men sat at Dwight's feet, waiting quietly for the law to come to them, and it came. With Keener, on the other hand, the classroom was a battlefield. The student were flouted and buffeted until, fighting mad, at white heat they learned the law.

Professor Ware was from his appointment until his retirement a decade ago one of the most delightful members of our academic family. It was he who wittily but none the less truly prophesied that the move from Forty-ninth Street would transform Columbia from a private to a public institution.

Two other men, still living but no longer in service, must be mentioned: Woodward, now president of the Carnegie Institution, was notable primarily for his influence on his colleagues, and particularly upon the younger men, to whom he always gave the best he had. On his periodic visits to the Faculty Club nowadays the whole company rises to grasp his hand, and wherever he sits now, as formerly, the sparks are sure to fly. Woodberry, who, as the mood was on him, would lecture better or worse than any man I have ever sat under, devoted himself, on the other hand, almost wholly to his students, and upon many of them his influence was extraordinary. The evidences of its lasting quality are to be found in the recent formation, in his honor, among the students of ten years and more ago, of a Woodberry Society.

The greatest factor in preserving the unity of our traditions has been the long and overlapping terms of service of three distinguished professors, each a son of the College, each a man of picturesque and lovable personality, and each, to use Dr. Alderman's phrase, endowed with the serene unfailing youth of men who think clearly, will resolutely, and work joyfully toward good ends. In 1820, Charles Anthon joined the faculty, to serve for forty-seven years. With his silk hat and his cane, his sharp tongue and his kind heart, Anthon was the dominating figure for many years. Poe happened to meet him, and wrote: " He would impress one at first sight with the idea of his being no ordinary man. He has qualities indeed which would have insured him eminent success in almost any pursuit; and there are times in which his friends are half-disposed to regret his ex-



College Teachers in 1886

GREENE QUACKENBOS SHARE WALTHER PRICE
MUNROE SMITH REES O'CONNOR
GOODNOW BOYESEN BURGESS VAN AMRINGE ROOD DODGE
MAYO-SMITH MERRIAM
PECK, W. G. PRESIDENT BARNARD DRISLER

clusive devotion to classical literature." Anthon was the first man to make generally known in America the results of German classical scholarship, and his personal educational ideas must have been excellent, to judge by his vigorous testimony before the trustees in 1857. Students, colleagues, and trustees all feared him, particularly on his gouty days, but they all loved him. One of the official records of student disorder that I came upon refers to " tumultuous cheering for the person they call Bull Anthon."

In 1843, Anthon's pupil, Henry Drisler, became a tutor and was in active service until 1894. Drisler, to quote President Butler, " loved Columbia—as he served it—with his whole nature. To him its name was not an empty word, but rather the symbol of whatsoever is true, whatsoever is lovely, whatsoever is of good repute. Loyalty to Columbia, to its traditions, its policies, its hopes, and its ideals was of the very fiber of his being."

The third of the trio, known before his beard grew white as Barbarossa, joined the staff immediately upon his graduation in 1860, and his retirement from active service, fifty years later, was marked by expressions of enthusiastic loyalty and affection that it falls to the lot of few men to receive. To anyone who has known anything at all about Columbia College during the last half century, it is needless to describe the personal qualities of Professor Van Amringe, and in any event it would be practically impossible. He and his companion, Chandler, have been so completely appropriated by the alumni as patron saints that it may be said without prejudice to their academic service that their most striking usefulness has been in cementing the ties between the alumni and their Alma Mater.

the Botanical Garden, which is to-day the most valuable item in the endowment, but he was a little too vigorous as an administrator, and the College breathed a sigh of relief when he resigned in 1816 and President Harris, whom he had previously overshadowed, took the reins. Harris apparently made an excellent president. Anthon, in 1857, looked back upon his administration as the heroic age of the College.

During the days of Judge Duer and Professor Nathaniel F. Moore, who succeeded him, the College was at its hardest straits. The New York University (founded during Duer's presidency under a former trustee of Columbia) eclipsed the older institution, students decreased, and the college debt mounted. Duer and Moore served faithfully, but the times were out of joint.

The next president, whose lines were cast in pleasanter places, was Charles King, banker, merchant, journalist, and man of the world. His father, Rufus King, had been one of the great Columbia trustees. During Rufus King's service as Minister to England, his son had been educated at Harrow, where he was a contemporary of Byron, and elsewhere abroad. He had returned to fight in the War of 1812. King was a fine figure, and, though no longer a young man when he became president, he was full of vigor. Indeed, after his retirement as president, he rode to hounds upon his trips abroad to visit his daughter, Mme. Waddington. An athlete himself, he was the first to interest himself in student sports. It has been said of King that he had strong likes and dislikes, the former of which he plainly showed, the latter of which he concealed as well as he could.

Of the later presidents, I have endeavored to give some picture in the earlier chapters of this book.

VI

STUDENTS AND STUDENT LIFE

The twofold Relation. Religion and Morals. Fraternities. Academic Groupings. Problems of Assimilation. Undergraduate Enterprises. Records of Earlier Days. Athletic Sports. Music, Drama, Debating. Publications. Enrollment Figures. Student Diversity. Self-Government. Alumni Affairs.

Mr. Gellett Burgess might well have included in his collection of bromidic utterances: " Oh, yes, Columbia has splendid buildings and great professors, but then, you know, it has no student life." As a matter of fact, if anything, it has too much student life. It has even plenty of the conventionalized college life to which the Bromide refers. Some of these student works will be noted in the chapter on an academic year, but these show but a few among dozens of different kinds of student inter-relations, which, like a tangled skein, cross one another at so many points that a clear description is very difficult if not impossible.

At Columbia it must be granted that college life is likely to be an elective rather than a prescribed course. For various reasons many of the students take little or no part in it, but to say, as many do, that the average undergraduate does not have it and have it abundantly is simply to state what is not the fact.

The relation of any student to the student body has two sides, that with the students as a whole and that with the groups which, in academic work, are doing the same things that he is doing. While naturally the closest connection will be found in the latter case, there are many factors at Columbia to tie the diverse body together as a whole. Each year more than a hundred students enter the different graduate and professional schools of the University after graduation from Columbia College, and the number of Barnard graduates is also considerable. Another strong element cutting across school and college life is common residence in the dormitories. About one thousand students now live in university halls, and over five hundred others in fraternity houses or boarding places for students near the University. This has all come about within the last decade. In 1901 the number who lived in the immediate neighborhood was less than four hundred.

Another factor which binds together the students of all parts of the University is that of the religious life and the interests allied thereto. On the devotional side the center is, of course, the beautiful St. Paul's Chapel, where voluntary services are held daily. The practical side of religious life is centered in Earl Hall, a building given by the late W. E. Dodge in memory of his son, which has some forty thousand visits each year from students. Earl Hall is administered by the Young Men's Christian Association of New York; it is closely identified with settlement work in various parts of the city, and the students, regardless of their religious beliefs, do much work of this kind.

Beside the Christian Association, which has branches or allies at Teachers College, Barnard College, the Medical School, and at the Summer Camp, there is a flourishing club of the Catholic students of the University, a Churchman's Association, a Menorah Society for the Jewish students, and even a club of Christian Scientists. The Socialists' Club might be mentioned in this connection, for to most of its members Socialism appears to be a kind of religion.

The general attitude of the students toward religion is far more sympathetic than is generally supposed by the superficial observer. The amount of orthodoxy may be disappointing to the orthodox, but among the more serious students there is to be found almost uniformly clear idealism, remarkable appreciation of the highest standards of service, and an acceptance of them, as well as a real desire to know the truth about religion and to gain from it inspiration and support.

This may be as good a place as any to speak of general moral conditions. In this matter city institutions have an undeservedly bad name. President Butler has pointed out that the "notion that a great city abounds in necessary temptations of which small industrial towns, semi-rural, and rural communities are free, is an illusory one. A young man of intelligence and character can keep himself free from contamination in one place as well as in another, and there is no ground whatever for the apparently widespread belief that to send a young man to a college in a great city is to subject him to a kind, an amount, and a variety of temptation that would be spared him if he were elsewhere. A healthy human environment, clean companionship, and wide-appealing interests and opportunities of a worthy sort are what will do most for a young man, and these are precisely what college life in a great city can furnish."

The basal temptation for the young man is the perfectly natural and normal temptation to find diversion. The wealth of opportunity for profitable diversion open to the student is not the least of the claims of the city institution. A frank student who once discussed the matter with me put it in this way: "In the country a fellow has only an occasional chance to be bad and he has to take the opportunity when the time comes. In the city he can go to the devil any time that he wants and he puts it off from day to day just as he puts off the things he ought to do, like his prescribed reading and his mathematics review.''

Another bridge extending from school to school is the system of Greek letter fraternities. The fraternities at Columbia date back to the Park Place days, Alpha Delta Phi having received a charter in 1836. About five years afterward came Psi Upsilon and Delta Phi. The question of priority between these two became acute when, for some years, the chapter of Alpha Delta Phi lapsed and the controversy strongly colored undergraduate politics in the sixties and seventies. Delta Psi was founded at Columbia in 1847. Twelve more chapters were organized at Forty-ninth Street, and there are now thirty fraternities, each maintaining its own chapter house, and one small but influential senior society. This is too many, particularly in view of the high cost of maintenance in New York, and the limited resources of most of the students. There should be some kind of co-operation in purchasing; and a private fraternity apartment building, with one floor to each society, would prove a good investment in more ways than one.

The influence of the men's fraternities has become distinctly better throughout the country within the last decade and many of the dreadful things that are now said about them are said by persons who have little or no knowledge of present conditions. I have found most of the chapters at Columbia to be distinct aids in maintaining scholarship standards and more likely to keep their younger members upon the path of virtue than to turn them from it. They have no aristocracy of wealth, many of the most active members being self-supporting, and they give a welcome home to the fraternity men coming by the score each year from other colleges. On the whole, I feel that the fraternities at Columbia are a source of good. They have, of course, touches of intolerance and snobbishness, the older societies looking down upon the younger, as all look down upon the "barbarians."

There are also the customary honorary and professional societies. For women there are six chapters at Teachers College and at present eight at Barnard, although these latter are by faculty order to go out of existence when the present initiates have graduated.

Turning from the general factors in student social life to particular schools, the spirit in the Schools of Mines, Engineering, and Chemistry has from their foundation been strong. Apparently it is a fine type of boy that is attracted by the engineering profession, and the men are bound together by the long hours in the laboratory and shop, and particularly by the common life at the summer camp and on geological and mining trips. The Law School presents a compact body of well-trained men of serious purpose and, relatively speaking, mature years, the average age at entrance being nearly twenty-three. Some few of the students, particularly those who have come from the College, do take part in undergraduate affairs, a large proportion, even for Columbia, spend part of their time in earning money, but the general impression is that law students, except when they are asleep, are either studying their subjects or talking about them to one another. The law seems to be a wonderfully satisfying type of intellectual pabulum. A selected body of the students edit what is one of the most creditable publications of the entire University, the *Columbia Law Review,* to which legal luminaries from all over the world are glad to contribute.

Except for some few who live in the dormitories, the students of medicine and pharmacy have but little chance to participate in the general life of the University. This is unfortunate for all concerned, but it is hoped that at some time in the future the whole University may be brought together. The students of medicine regard themselves as the hardest worked members of the University, and they are probably right. Whether they would not become even better doctors if the pace were not quite so swift, is a question which from time to time arises in the mind of the outsider. The faculty has indeed voted to reduce the hour-schedule considerably for the future.

If I were to be pinned down to state which part of the University has the most highly organized and the most enthusiastic student life, I should be compelled to give the palm to Barnard College. While the columns of the men's daily are filled with appeals and even threats about " getting the men out "—and this, I think, is true in general of the publications of men's colleges—the problem at Barnard seems to be to keep the girls from plunging into too many activities and devoting too much time to them. They are the best actors in the University, they devise the cleverest " stunts," and their Greek games furnish one of the most picturesque performances of the year.

Teachers College, like Barnard, has a vigorous existence of its own and an intense corporate spirit. In the words of Dean Russell: " Loyalty to one's Alma Mater may mean much or little, but in our case it is not based upon adventitious circumstances. We have no athletic sports, no crew, no football, baseball, no glee club, no debates, and no intercollegiate leagues. In fact, we are without any of the accessories commonly believed to be of importance to college life, yet we manage to have a good time and find something to do every day." The graduate students at Teachers College include some of the finest material in the entire student body. When men have thrown up a good position to take a year or more of academic work at very short commons, in order to break through the lock-step of their profession, they are likely to prove worth-while students and companions.

The summer has a life of its own. The director has taken particular pains to organize student gatherings of all sorts, and the arrangements made seem entirely to the mind of the students. I know of no other body of men and women the size of an army brigade that get to know one another so promptly.

One of the commonest references that one hears with regard to Columbia is that its position at the gateway of European immigration makes it socially uninviting to students who come from homes of refinement. The form which the inquiry takes in these days of slowly-dying race prejudice is, "Isn't Columbia overrun with European Jews, who are most unpleasant persons socially?" The question is so often asked and so often answered in the affirmative by those who have made no effort to ascertain the facts that it will do no harm to speak frankly about it. In the first place, Columbia is not "overrun" with Jews any more than it is with Roman Catholics or Episcopalians. The University is open to any student of good moral character who can satisfy the entrance requirements, without limitation of race or creed, and it is to be hoped that this always will be so. No questions are asked and no records kept of the race or religion of incoming students, but it is evident that the proportion of Jewish students is decreasing rather than increasing. Each year more Jewish parents are realizing the advantages to be obtained from sending their boys away from home. The family and intimate social life of the Jews is so intense that there is a real danger of social inbreeding; family and racial traits which ought to be minimized are accentuated, and the Jewish prejudice against the Gentile, which is as real a thing as the prejudice in the other direction, is maintained.

By far the majority of the Jewish students who do come to Columbia are desirable students in every way. What most people regard as a racial problem is really a social problem. The Jews who have had the advantages of decent social surroundings for a generation or two are entirely satisfactory companions. Their intellectual ability, and particularly their intellectual curiosity, are above the average, and the teachers are unanimous in saying that their presence in the classroom is distinctly desirable. There are, indeed, Jewish students of another type who have not had the social advantages of their more fortunate fellows. Often they come from an environment which in any stock less fired with ambition would have put the idea of higher education wholly out of the question. Some of these are not particularly pleasant companions, but the total number is not large, and every reputable institution aspiring to public service must stand ready to give to those of probity and good moral character the benefits which they are making great sacrifices to obtain.

With the rapidly growing improvement in the economic condition of the Jews throughout the country, the problem of their assimilation in undergraduate life is one which will have to be faced by every college of the first class—and they will go to no other. It is hard, in fact it is impossible, to do away in a day with the prejudices of twenty centuries. It is particularly difficult in the intolerant period of youth, but harder problems have been faced and solved by the American community.

The student's real education depends in large measure on his student life as a whole. Anything the institution can do to insure the wholesomeness and sanity of this life and to vitalize it and enrich it, is educational work of the highest significance. There is a Filipino riddle in which a pair of shoes is called two boats with but a single passenger. I often think that this gives a good picture of the American undergraduate. In spite of statements to the contrary, in general he insists on wearing the shoe of intellectual training and wearing it pretty hard, but he is equally persistent in wearing the shoe of undergraduate activities. The forming of organizations of all kinds, and particularly the holding of offices therein, seems to gratify a fundamental human craving. The current student's year-book includes a hundred clubs and societies, and there are perhaps as many others in more or less permanent existence.

This is a greater number than can be adequately supported by the student body. For one thing, the city itself offers many of the means of legitimate diversion which in the country must be provided by the students themselves, many of our organizations being purely imitative rather than supplying an actual student need. Then, too, the students have relatively little time to put into student organizations. The academic standards are high and the hours, particularly in the scientific courses, are long. Almost a third of the students have to earn money as well as study.

In the eighties and nineties the Columbia students were willing to live their own life—and it was a vivid and profitable one—largely regardless of student conventions elsewhere. In fact, for some years, thanks to brilliant and venomous student journalism, Columbia was at swords' points with nearly every other Eastern college. During the brief reign of football, which began in 1899, there was a strong tendency to mold the college community into the standard pattern. To-day again it would seem that the elements of college life that best flourish here are the unconventional rather than the conventional, although the controversy over a recent article on this subject by Professor John Erskine, himself an alumnus, made it clear that students and alumni are far from unanimous in believing that this is true, or if true, desirable.

As a matter of fact, I think the best way to describe the actual situation is to say that at Columbia a student group of the conventional undergraduate interests and opportunities, in numbers about the size of Hamilton or Bowdoin, is imbedded in and intertwined with the large and more varied and individual student life surrounding it. In his article Erskine said, among other things, that: "Spirit of the conventional sort Columbia has lacked; in the atmosphere of the most sophisticated city in America, a parochial satisfaction in dead alumni and a few live mannerisms has not prospered. . . . It is the presence of the city at her doors that is creating the new Columbia spirit." He pointed his moral by a personal reminiscence. Meeting a student who sometimes did typewriting for him, he was politely asked as to the fate of a certain story which the latter had copied some time before, and which, as a matter of fact, had not as yet found a publisher. The student did not seem astonished to learn this. He had himself thought it too psychological, and he went on to say that as he copied it a plot of his own had come to him, and for the resulting story he had that morning received a comfortable check.

For the best students, at any rate, a good part of the life outside the classroom is spent in informal contact with the instructors. The system of prosectorships at the Medical School, the common interests of the *Columbia Law Review,* the work of the student assistants at Barnard College, the informal work of the various departmental journal clubs, and the close contact of preceptor and student in the work of the honor courses in the college, all tend in this direction, and much of the paid work done by students is of a character which adds to their scholarly equipment. In the scientific departments many of the students are taken into the field by their instructors. Of the student clubs, some of the best—as, for example, the literary coterie known as Boar's Head, the Politics Club, the Chemical Society, and the Deutscher Verein—show the beneficent influence of a guiding faculty hand.

To understand the student life of to-day, one must know something of the earlier epochs of the institution. To be sure, Columbia is the only one of the larger institutions that has been transplanted bodily twice within a half century, and these transplantings have marked sharp changes in the manner of student life. The influence of the older days, nevertheless, is felt in many ways. For example, the students at Park Place had a reputation for formal and courtly manners, and, although this cannot be said to have persisted *in toto,* Columbia is still about the only college where professors and students touch their hats when they meet.

Much of what we know about the student life in the pre-Revolutionary days is gathered from the full and illuminating laws passed for the governance of the students. From those of 1755 we can see that there was danger of cock-fighting, card-playing, and dice-throwing among the students, from the establishment of a fine not to exceed five shillings for these offenses. For the apparently less serious crimes of fighting, maiming, slandering or grievously abusing any person, a smaller fine of three shillings was established. Among the rules of 1763 we find that the junior students shall pay such respect to the seniors, and all of them to the president, professors, fellows and tutors, as the said president, etc., shall direct and under such penalties as they shall think proper to prescribe.

In 1773, Washington entered his stepson and ward, John Parke Custis, as a student. The best contemporary description that we have of the life at the College is contained in the boy's letters.

" It is now time to give you a short plan of my apartments and of my way of living. I have a large parlour with two studys or closets, each large enough to contain a bed, trunk and couple of chairs, one I sleep in and the other Joe [presumably his servant] calls his, my chamber and parlour are papered, with a cheap tho' very pretty paper, the other is painted; my furniture consists of six chairs, 2 tables, with a few paultry Pictures. I have an excellent bed, and in short everything very convenient and clever. I generally get up about six or a little after, dress myself and go to Chappel, by the time that prayers are over, Joe has me a little breakfast, to which I sit down very contentedly, & after eating heartyly, I thank God and go to my Studys, with which I am employed till twelve, then I take a walk and return about one, dine with the Professors and after Dinner study till six at which time the Bell always rings for Prayers, they being over College is broak up and then we take what amusement we please."

In this period of course the really significant thing was the way the young College caught fire from the flames of the Revolution, and the most vivid picture of its college life has already been mentioned—the young Hamilton holding the mob at the College gate in order that his president might have an opportunity to escape.

There was apparently some kind of debating society as early as 1766, but the first evidence of any formal organization is found in 1784, when the students, with some others, formed a society for the purpose of improving themselves in polite literature. One must not forget that these students were boys, and young boys at that. Only a century ago one of the students graduated at the age of thirteen. When about 1800 the College building was given up wholly to classroom work and no dormitories were maintained, the students had very little opportunity for a common undergraduate life. Such headquarters as they had seem to have been the cakeshop at the corner of Church and Murray streets. College enthusiasm, however, was not wanting in spite of unfavorable conditions. The question of a semi-centennial celebration was first broached at a meeting of the students held in 1836. The two literary societies were active, and I have heard, from one who is now a distinguished trustee, of at least one series of informal gatherings in a room on Canal Street where the refreshments consisted of coffee and sausages, but where the talk was upon more profitable matters than the prattle about intercollegiate athletics and professional baseball which to-day wastes so many of the precious hours of youth. A boy who neglects his study to practice athletics has at least a vigorous body to show for it, but one who neglects his study to talk about them has little but an empty mind. Indeed, at that period there were no athletics to talk about, unless one includes billiards, which was played by those who could afford it, and snowball fights in the winter.

Although professors like "Bull" Anthon knew well enough how to preserve classroom discipline, the disorder in some of the other classes was scandalous, and faculty and trustees devoted apparently most of their time to unintelligent methods of coping with it. They had, indeed, little else to do, for the curriculum was apparently fixed for all time and there was no money to spend on enlargements. Unfortunately they believed too fully (as Francis Wayland told them in 1857) in the efficacy of laws, and student crime continued unchecked.

President Moore used to read at chapel any notices that might be handed to him—there was no *Spectator* in those days—and some young imp had a job printer set up a notice in the conventional form of the president's own death and the announcement for the funeral services, and then had this, in the guise of a newspaper clipping, slipped in among the official notices. The absent-minded president had read well through his own obituary notice before its purport dawned upon him.

General Charles King, who left the College as a freshman at the outbreak of the Civil War, has written of the college life in the early sixties at Forty-ninth Street, and particularly of the martial zeal which filled all hearts from the president (his grandfather) down. The war, indeed, came close to the College in more ways than one, for the buildings narrowly escaped destruction during the draft riots.

Technically speaking, the institution ceased to be local, not to say parochial, when the Law School was established and the Medical School rejoined, but, as a matter of fact, these moves had practically no effect on the college life. When the School of Mines was started, the two sets of students would at first have nothing to do with one another, but the influence of the vigorous men whom Egleston and Chandler were attracting from the country at large, before long made itself felt.

In the late sixties student activities were still practically centered in the life of the two literary societies and in the fraternities. There was still student disorder, some of it of an amusing kind. For example, in the prescribed chapel service the students by prearrangement would sing lustily the first line or two of a hymn and then stop suddenly, leaving the quavering voice of the old janitor, apparently the only member of the government to share the privileges of chapel, to carry on the lines alone. There were vigorous rushes in and about the old building which John Kendrick Bangs later christened the Maison de Punk. The resourceful Dr. Chandler is fond of telling how, on one wintry day, when he was temporarily in charge, a glorious rush in the " Pass of Thermopylæ " was brought to nothing through his inconsiderate playing of the hose upon the combatants.

Perhaps the pleasantest feature of college life in those days was the Semi-annual Exhibition, first held under the direction of the authorities, and, after the Civil War, arranged by the students themselves and held in the old

Academy of Music in Fourteenth Street. The exercises were probably not of a profound character, but all the pretty girls in town were there, and everyone had a good time. The proceedings were sometimes marred by the presence of persons under the influence of liquor, but the students assured the faculty that this was a failing exclusively limited to outsiders.

A more vigorous student life began to develop about the middle of the seventies. The winning crew at Henley was probably both an evidence and a cause. In this period student journalism and student athletics flourished and class politics, usually abetted by the fine Italian hand of the fraternities, reached almost the point of bloodshed. The test of strength between the warring factions was the award of the Goodwood Cup to the most popular junior, and this award had finally to be abandoned after 1878 because of the bitterness it engendered.

The present students' lounging room in Hamilton Hall, which was furnished by the class of '81 and named the Gemot, is a reminder of the original Gemot, organized in that class, with headquarters in a beer saloon opposite the College grounds. In the nineties the beer saloon was deserted for the more aristocratic Buckingham Hotel. Its barroom, in my time, attracted far too much of the attention of some of the students. One of the waiters there, finding his occupation in large part gone, followed the College when it moved uptown. He bought some materials from an old mansion that was being torn down and avoided rent by setting them up as a College Tavern upon what would have been One Hundred and Twenty-first Street had the street been cut through. In the early days at Morningside, when everything was new and bare, Mike's tavern furnished a cozy retreat, but there was too much drinking here also, far more than there is at present among the students, and it was a good thing when the city saw fit to recognize the trespass. The land has since been sanctified by the erection upon it of the Union Theological Seminary.

The attitude of Columbia toward athletics has been sympathetic, but never, I think, idolatrous. King was the first president who interested himself in student sports. He tried without success to get the trustees to establish a student billiard room, but he did succeed in getting a teacher of boxing and fencing. In 1867 an appropriation of two hundred dollars was made for student athletics. The sum indeed was small, but it was the first made by a college from its corporate funds for this purpose. Since then other appropriations have been made, and individual trustees, notably W. G. Lathrop and F. S. Bangs, have labored hard in the interest of student sports, and so have many of the professors; on the other hand, the tail has never been permitted to wag the dog.

As one looks over the record of athletics at Columbia, the first thought is of the individual champions and heroes. All New York, from the mayor down, assembled to welcome Goodwin and his comrades upon their victorious return from Henley in 1878. Sayre of '81 helped mightily to bring the championship in track athletics to Columbia, and his eye is still so keen that he served as captain of the American pistol team at the Olympic games. The president of the College Alumni Association walks with a cane to-day as the result of an heroic physical sacrifice in the 'varsity boat twenty-five years ago. The Mapes brothers—Charles, Herbert, and Victor—brought many championships to their Alma Mater, and the beautiful iron gate on Broadway is a memorial to Herbert Mapes, who was drowned while trying to save a woman's life. Colonel Roosevelt has paid a fine tribute to one of his Rough Riders, shot in Cuba, Hamilton Fish, of the Class of '95, a University oarsman. A recent president of the Amateur Athletic Union, Gustavus T. Kirby, learned his devotion to athletics at Columbia. A little later come Weekes and Morley, idols of the football team, and the hero of to-day is Babcock, who won the world's championship in the pole vault at Stockholm.

Rowing has always been the premier sport, and the happiest memories of many an alumnus are of the afternoons on the Harlem or the Hudson, followed by days at New London or Poughkeepsie. The first class crew was apparently that of 1859, and the first regatta in 1876. That year the race at the Centennial Celebration at Poughkeepsie was lost by the fainting of one of the men, a tragedy repeated, as all the world knows, at Poughkeepsie thirty-five years later. In the seventies Columbia was easily the foremost rowing college in America. The crew of '86 was also a famous one, but shortly afterward rowing was given up as an intercollegiate sport, to be triumphantly revived by an intercollegiate victory at Poughkeepsie in 1895. Since then, although there has been no victory there except that of the freshmen in 1911, there have been sterling crews and many a heartbreaking finish.

Track athletics also have a fine background. For the ten years beginning in 1877, when the first intercollegiate championship was won, the blue and white were more likely to be at the front than any other colors. In more recent years, although there have been well-rounded teams, and much interest in the class and college contests, there has been a lack of the "stars" necessary for victory at the intercollegiates.

Baseball has been played since the sixties, and of late years, like hockey and "soccer," it is steadily growing in interest. A sport which has had a conspicuous and persistent success at Columbia is basket-ball. The game was invented as recently as 1892 as an adjunct to regular gymnasium work, and the first Columbia teams were those of the girls of Barnard and Teachers College. A masculine 'varsity was first formed twelve years ago, since when six intercollegiate championships have come to Columbia.

In the public mind, however, Columbia's most conspicuous sport is conspicuous by its absence. The discussion of intercollegiate football is sure to be a thankless task to one who is both an alumnus and an officer, for most of the alumni, even those who appreciate the courage of the authorities for their stand in the face of what was almost a national idolatry, believe that the abolition of the game in 1905 was a serious mistake in the interest of the institution. On the other hand, the faculty, almost to a man, hold the opposite opinion. The game is the oldest Columbia sport, having been played as far back as 1834. After a lapse of some years it was taken up in 1899 under dubious auspices, and, in spite of indignant denials by credulous officers, it is unfortunately true that certain members of the early teams had no right to play as amateurs and collegians. This, however, was not the reason for its abolition. The members of later teams were all right as regards eligibility, even though most of them for their own sakes should not have been playing football.

The abolition of the game did not represent the individual caprice of President Butler, but was the result of profound feeling on the part of almost everyone who was responsible for the educational work of the University that football had become an academic nuisance. Elsewhere than in a complex metropolitan university, where the efficiency of the year's work depends largely upon getting under way promptly, the undoubted merits of the game may well outweigh its disadvantages. At Columbia, however, football developed not into a sport for college boys, but into a serious business for mature and often reluctant professional students who could ill afford the time for it. In its last year the only Columbia College student to win the football " C " was E. T. Collins, who has since joined the ranks of distinguished alumni as a professional baseball player.

Football, nevertheless, was a powerful factor in awakening the loyalty and enthusiasm of the alumni, and their disappointment is a reason for real regret. After a year or so of bitter feeling, the undergraduates themselves accepted the situation with more philosophy than their elders. Class football was experimentally re-established in 1907, but it failed to get a foothold and has disappeared. In Professor Erskine's words: " Unless they are made to play by artificial stimulus of one kind or another, undergraduates will not play this game, for it is no longer a sport and no longer amateur. The students are not mollycoddles, they are not going to the deuce, and they are not eager to furnish a gladiatorial combat for spirited alumni to bet on."

Whether it is the spirit of individualism in which some rejoice, or whether it is easier with our somewhat limited undergraduate body to get together a small team, I do not know, but it is a fact that the record of the minor sports, so-called, is unusually good at Columbia. Intercollegiate championships have been won, and often won more than once, in bicycle riding, shooting—and, by the way, the rifle match at Stockholm was won by a Columbia student—bowling, wrestling, chess, swimming and water polo, gymnastics, lawn tennis and fencing.

Columbia has certainly not yet solved the problem of a general participation in athletic sports. Too many "carry on their morals what they ought to carry on their muscles." Still the signs for the future are hopeful. Informal fraternity and class contests of various kinds are growing in number, and the physical education department conducts its prescribed courses in the open air whenever possible. That the problem of general undergraduate participation is not insoluble we know, for Oxford and Cambridge have solved it. To be sure, they enjoy the advantage of a more benign climate and of unlimited playing fields, but American ingenuity is not what it is supposed to be, if the difficulties here cannot be overcome.

Of the multifarious other activities of the students, past and present, the limits of space forbid more than a very brief review. The class of 1869 had a quartet, the first evidence of the beginning of musical organizations. A Glee Club was formed about ten years later, and since then the record has been probably neither better nor worse than at other colleges. The dramatic record is more picturesque. Beginning with the performance of the first original play, "Igala," in 1880, the Columbia plays, by Morrison and others, had great popularity and were the chief support of student athletics. Among the authors either of the words or the music of later plays have been Guy Wetmore Carryl, John Erskine, Henry Sydnor Harrison, and among the performers, W. C. deMille, the dramatist. The 'Varsity Show of to-day is a most elaborate affair, admirably staged, with good dancing, startling costumes, and many good songs, but one wonders whether it is the right type for an institution of learning. Nevertheless, the boys who go into the shows have a very good time of it, particularly on the trips to Washington, Pittsburgh, and elsewhere, made under the auspices of the alumni clubs.

More representative, though less elaborate, are the Elizabethan and Irish plays and those in French, German and Spanish, given by the literary societies, the plays at Barnard College, and particularly the work of the recently organized Columbia University Dramatic Association, which is open both to men and women, and has already given admirable performances.

There was apparently a short-lived debating society in Hamilton's day. Of the organizations now at Columbia, the oldest is the Philolexian Society, founded in 1802. Four years later came the Peithologian. For many years these two represented about all there was of college life. Such literary work as was done was done for them rather than for the college, and their libraries, in contrast to the official one, were available for use. Altogether the little college would have been a dreary place for the student had it not been for them. It is pleasant to remember that the Columbia flag of blue and white combines the colors of the two societies.

About 1842 a small Columbia group formed a society for improvement in letters which grew into a notable New York coterie known as " The Column." This was later merged into the Century Association, where the lamp upon the silver column is still lighted with due ceremony at every meeting.

In 1877, the Barnard Literary Association was founded as a protest against the control of the older societies by the fraternities, and when intercollegiate debating came into vogue it, with Philolexian, took charge of this activity. In 1897 Columbia won a victory over the Harvard Forum, and soon afterward defeated the University of Chicago. For some years thereafter it was one of the strongest debating colleges of the day. After a brief decline in interest, debating is again to the fore, and in 1913 Columbia won both contests in the triangular league with Cornell and the University of Pennsylvania.

After some ephemeral efforts (the earliest, which dates from 1813, being in manuscript) *Acta Columbiana* was founded in 1873. After suffering from the undignified and slovenly writing in current college journalism I must confess to some relief in finding the student writing of forty years ago to be just as bad, the only difference being that it erred on the side of fine and florid writing rather than on the side of " journalese." This criticism, however, no longer holds true of the days, 1880-83, when *Acta* was being edited by Harry Thurston Peck, Nicholas Murray Butler, and John Kendrick Bangs. Writing of this period, W. A. Bradley, himself one of the chief figures in a later revival in student letters, says that " not only was it one of the best papers ever published at Columbia, but there has seldom been in any American college, we are confident, a publication that has had at once more intrinsic interest for the casual reader of back files to-day, and at the same time a flavor so thoroughly characteristic of the little college world which it represented. It was at once admired and hated by contemporary college periodicals, and was at one time removed from the exchange list of Yale papers. Outside of college circles it attained considerable notice, and its really excellent verse, which was the work for the most part of Peck, Bangs, Frank Dempster Sherman, and William Ordway Partridge, was quoted widely."

Shortly after this period *Acta* was crowded out by a more vigorous rival, *Spectator,* founded in 1878. In the nineties came the *Literary Monthly,* and the less serious *Morningside,* which for a brief period rivaled the *Acta* of the previous decade in brilliance. Bradley's " Imaginary Lectures " is one of the classics of undergraduate writing. A decade ago the *Jester* was born, an illustrated monthly which closely resembles the little girl with the frontal curl. Shortly afterward the *Lit* and *Morningside* combined forces, and the present *Monthly* is by far the most " advanced " publication of the entire University. It is admirably written, but much of the material must make the forbears of the youthful authors stir uneasily in their graves. All these activities left *Spectator* free to develop into a newspaper, and to-day it holds a relatively high place among student dailies.

A college year-book, in the modern sense, was first published in 1864. This shows that at that date there were, besides four fraternities, two local secret societies, a chess club, and a billiard club, two literary societies, a Christian association, a chemical society, and a baseball association, rather a sharp contrast to the innumerable organizations of to-day. Like everything else that Columbia undertook during the brilliant period between '78 and '84, the *Columbiads* were of high order. The present *Columbian* is a handsome volume of the conventional type, and a necessity to all interested in college life. Owing to the presence of an architectural school, the illustrations are somewhat better than the average.

For those upon whose " unreceptive minds statistics fall like chilling pellets of fact " the detailed statements as to student growth and registration are tucked away in an Appendix to this volume, where they may be neglected at will. To summarize these briefly, in 1913-14, almost exactly 10,000 students enrolled in Columbia University. (Sixty years ago there were but 172.) This figure includes the forty-five hundred students of the Summer Session, but does not include about four thousand in Extension Teaching and other irregular courses. About one-quarter of the students are undergraduates, an increase of seventy-five per cent. in ten years; another quarter are non-professional graduate students, an increase of one hundred and sixty-seven per cent. in the same period; half are professional students, an increase of sixty-two per cent. More than half the students in the University Corporation have already received the first degree. Of these five hundred hold more than one degree, and one student, still here, has five! At Commencement, 1913, 1,656 degrees and diplomas were granted. The proportion of men to women is thirty-seven to twenty-three.

The degrees already held by last year's students were conferred by 351 different institutions. Those that have sent the largest total of graduates to Columbia for professional and higher training are, in order, Yale, the New York City College, Princeton, Harvard, Amherst, Williams, Rutgers, New York University, and Cornell. Outside the United States, Toronto is in the lead.

The tendency to enter the different departments of Columbia with advanced standing is noteworthy. It has always been a feature of the student body in engineering and Teachers College, and is rapidly coming to be so in law and medicine. In fact, to-day the medical class is likely to graduate more men than it enters, in spite of the inevitable mortality in so severe a course. Columbia College also is coming to draw a very considerable portion of its membership from other colleges. In 1891 there were ten students admitted to advanced standing. Last year there were more than one hundred, coming from over fifty different institutions.

The wide geographical distribution of students is shown in the Appendix. Even in Columbia College only one-third of the students were born on Manhattan Island, and four-fifths of the States of the Union and many foreign countries are represented in the registration. Hardly more than three-quarters of the students come to the University from the North Atlantic division of States, and this proportion is steadily decreasing. The most rapidly-growing element is the South Atlantic division. As many students arrive from North Carolina alone as from all four of the more distant New England States.

The foreign students form an interesting part of the community, and many of them take an active part in the student life. We have, for example, had a Zulu noble, who won the gold medal for public speaking. A Chinaman, now in high station at Pekin, was editor-in-chief of the college daily. There are to-day sixty or more Chinese students, and Turkish students are here in sufficient numbers to maintain an Ottoman Society.

The social and economic distribution of the students is as striking as the geographical. A large proportion have to be self-supporting while in residence; indeed, it is the opportunities for work which New York City offers that attract many of them to Columbia. A recent valedictorian was a Custom House inspector. Others were policemen, revenue cutter officers, " lecturers " on sightseeing motors, artists' models, organizers of after-school classes of the little children of the rich, civil service and election workers.

Rough diamonds are an important factor in the attrition that should go on among students, and fortunately Columbia gets its share of them. There is no more important factor in a boy's collegiate education than the opportunity of rubbing up against boys and men of utterly different points of view. To serve its purpose, a college must be a real melting pot. The elements that make for intellectual friction and stimulus exist in any good college, but they exist in proportion to the breadth and depth of the human material there. The records of the Pulitzer scholarship committee, which studies carefully the home conditions of candidates, give an astounding picture of the economic position of some of the families that send boys—and desirable boys—to college. At the other end of the line are students whose wealth offers an almost equally serious handicap to satisfactory academic work. Few students drift to Columbia, and if they do they are soon cut loose to drift elsewhere.

President Barnard constantly but vainly tried to impress upon the students that self-government is a duty which they owe themselves as an element of character formation. Upon assuming the presidency, Mr. Low endeavored to foster the idea by creating an academic undergraduate senate, but the time was not yet ripe. Indeed, civil liberty is a slow growth in academic quarters as elsewhere. Now, however, student self-government is an essential feature of the undergraduate life. All the detailed problems of student affairs are in the hands of the Student Board of Representatives, elected by the students themselves and responsible only to them. Election is recognized as a real honor, and members take their duties seriously and perform them intelligently. The board of 1912 took the admirable initiative of publishing its records, and these published records will doubtless supply the element of continuity of policy, the lack of which had hitherto been the most serious handicap to the usefulness of the board.

There is very little student disorder. Trouble in the classroom is practically unknown. During the opening days there are three contests between the sophomores and the freshmen, closely supervised by the student board. There is, I fear, still a little individual hazing of freshmen, but the student sentiment on the whole is healthy in this matter as it is in others, and conditions are certainly improving year by year. Practically the only causes of trouble now are two vestigeal survivals from earlier days, the Sophomore Smoker in the fall and the Sophomore Triumph in the spring, neither of which is likely to be creditable to the student body. Readers of the newspapers may remember the lurid accounts of the proceedings of certain triumphing sophomores in the spring of 1912. The University turned over the matter for settlement to the Student Board of Representatives, which, after careful examination, suited the punishment to the crime by forbidding the offending class to hold the traditional ball in its junior year.

There is an admirable system of self-government at Barnard College and another at Teachers College. The dormitories for men and women, also, are practically self-governing.

The responsibility for athletic conditions is definitely placed upon a small group of alumni and undergraduates, with a paid director. A non-athletic organization, similar in character, has just been organized. In these matters the university administration concerns itself only in a general financial oversight through a controller of student organizations, to whom budgets must be submitted in advance, and with questions of academic eligibility, the approval of schedules, etc., which are in the hands of a small faculty committee.

Class organization, which began half a century ago, is maintained under difficulties to-day. Students enter both in September and February, many of them as sophomores and juniors, and the seniors are largely split up among the professional schools. The students do their best, however, and the freshmen, at any rate, are bound together by a realization of their lowly estate.

As early as 1816 a society of graduates existed "for the purpose of reading papers on literary and scientific subjects." The interest of the alumni was heightened by the semi-centennial celebration in the year 1837, and the present association was organized in 1856, among the most active in the movement being Abram S. Hewitt, '42. Since 1860 this Association of the Alumni of Columbia College has held regular meetings. It is more than a coincidence that 1860 was the year in which Professor Van Amringe graduated from the College, as since that time the association has been an object of his particular solicitude. It now numbers 1,412 and is in healthy condition. Three or four meetings are held each year, some of them, when the members feel that the University is not giving due attention to the College, being of a vigorous and exciting nature.

Every other part of the University has its alumni association. The Law School Association was revived in 1903 after a long sleep. That of the Physicians and Surgeons has an unbroken existence of more than fifty years, and that of the College of Pharmacy of more than forty. The Alumnæ Association of Barnard, founded by the fifteen graduates of 1893 and 1894, proved its energy by undertaking the management of a temporary dormitory for Barnard girls, which paved the way for Brooks Hall. The Barnard alumnæ are entrusted with the selection of one member of the Board of Trustees.

The alumni of all the professional schools are constantly on the watch lest the departments in which they are interested should fall into a rut. In 1885, for example, a committee of the alumni of the School of Mines made a careful study of the operations of the school and offered valuable suggestions. The loyalty of these schools is reflected in its strong alumni organization, which has 1,200 members, and does a great deal in helping the young graduates toward professional advancement. The Law School Association also finds places for its graduates and interests itself in the building up of the Law Library. The Medical Association maintains research fellowships and helps to keep up scientific equipment. This association and that of Teachers College make sure of at least one large gathering of their members a year by calling meetings, one at the time and place of the American Medical Association, and the other of the Department of Superintendence of the National Education Association.

For many years the alumni of certain cities have had some form of organization, notably in Chicago, Pittsburgh, Denver, and Washington, and during Professor

Tombo's vigorous secretaryship of the Alumni Council the number of out-of-town associations was greatly increased. The total number of separate organizations, school and regional, which have something more than a nominal existence, is now about twenty-five, and includes clubs in Japan, China, and Mexico.

Organized alumni interest in the institution as a whole did not come until the organization in 1895 of a University Council, representative originally of the College, Mines, and Medical Associations only, and later of other associations. Since 1908 the Alumni Council has maintained an office in the University, which is busy from morning until night. It conducts the *Alumni News,* has charge of the machinery for the election of alumni trustees, and of the alumni doings on Alumni Day and Commencement.

Although comparatively late in the organization of its alumni and, so to speak, in the capitalization of the alumni loyalty already existing, the question of direct alumni representation in our governing body was proposed more than a decade before arrangements were made at Harvard for the representation of alumni through the Board of Overseers, only to be rejected by the trustees. It was not until 1908 that the trustees announced that, as vacancies occurred, they would elect six members of the board upon nomination by the organized alumni of the University. It is not necessary to give a detailed statement of the necessarily complicated means of selecting trustees, beyond saying that the nominations are made by a sort of electoral college consisting of delegates of all alumni associations with twenty-five or more members, each association being given as many votes as it has graduates in good standing on its rolls. The man so elected serves for a term of six years and is not immediately eligible for re-election. The associations and the electors enter into their work with real seriousness of spirit, and the weight of their views is shown in that more than once the trustees have themselves chosen alumni who, although they had failed of formal nomination, were evidently held in high esteem by the electors.

In all alumni enterprises, here and elsewhere, certain alumni are perhaps more interested in getting prestige for themselves than in serving their Alma Mater, but as a whole, and particularly when one considers how recent is any sense of solidarity, Columbia has reason to be proud and appreciative of the loyalty and interest of her alumni.

Perhaps too much of the energy of the Alumni Council has been devoted to the details of its machinery. Still the council has already solved admirably certain of the complicated problems inherent in the alumni situation at Columbia, and the others will doubtless be met more and more effectually as time goes on. At present the council includes only the schools of the corporation, leaving the associations of Barnard College, Teachers College, and Pharmacy without direct representation in general alumni matters, but a plan for organizing a general Alumni Federation, which all men graduates of the University may join, has just been adopted. Its executive committee is to take over the present functions of the council. No provision is, however, in contemplation for woman suffrage, a fact to which attention is sure to be called in vigorous terms before very long.

In the earlier days the spirit of class organization after graduation was rather haphazard, although 1874 has dined together at least once each year since they were freshmen. Since 1880 practically every class in arts and science, and not a few in law and medicine, has maintained an organization, the graduates in the two former sometimes uniting in a joint association. The special celebrations after ten and twenty years do much to reawaken the class spirit of the members.

In 1901 a Columbia University Club was organized. It now owns a comfortable old-fashioned club building on Gramercy Park, and has 1,307 members. The building is much used, especially by the younger alumni, and in the winter there are admirable monthly club dinners. One of the most comfortable places to dine in New York during the summer is its open-air dining-room. The club maintains a friendly rivalry with similar organizations in squash and other games, and at the June regatta its corporate being moves into a well-stocked special car and is transported to Poughkeepsie.

The extraordinary organization known as the Early Eighties, mentioned elsewhere, was organized at Commencement in 1907, and has pointed the way for similar groupings of the Older Graduates and the Upper Eighties, and more recently the Forty-Niners (the last five classes at the Forty-ninth Street site). A large number of alumni whose offices are in the lower part of the city make a practice of lunching together at the Lawyers Club every Monday.

SOCIETY OF THE EARLY EIGHTIES OF COLUMBIA COLLEGE
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VII

AN ACADEMIC YEAR

The Summer Session. Preparations for Autumn. Opening Days. The Year's Routine. The Budget. Winter and Spring. Commencement. Other Pageants. The Home Stretch.

Columbia University is largely run by calendar. The academic calendar, which is prepared each year for the formal approval of the University Council, settles the various important milestones of the year, and each of the larger executive offices has its own calendar of the things for which it is responsible. This fact has suggested the idea of setting down, more or less in chronological order, some of the significant happenings of an academic year in order to show by a series of concrete examples something of what the Scotchman in the story called the worrking of the worrks.

Our year begins on July 1, which is a far busier day than one who has no idea of a modern university can realize. All the administrative officers are luxuriating in a sense of new-found wealth. They have been living on short commons for the last month or so, but the new appropriations are now available. The bursar is balancing the books for the year just closed and everyone else, particularly the director and the registrar, are preparing for the imminent onrush of Summer Session students. For this occasion the registrar commandeers the gymnasium and builds a complicated series of runways, whereby the new student, once correctly launched, is led inevitably to correct registration. By this method more than fourteen hundred students are enrolled in a single day without confusion or delay.

Both teachers and students of the forthcoming session are looking up abiding-places, renewing old acquaintanceships, and making new ones. A summer session faculty constitutes an intercollegiate society of great value and stimulus, and associations of this sort, as Professor Baldwin has pointed out, are worth far more than the crowded meetings of learned societies for three days in the winter; for it has wider scope and lasts for six weeks. The exchange of ideas at the Columbia Summer Session, where the faculty numbers some two hundred and fifty, may fairly be assumed to be worth something to the education of the country.

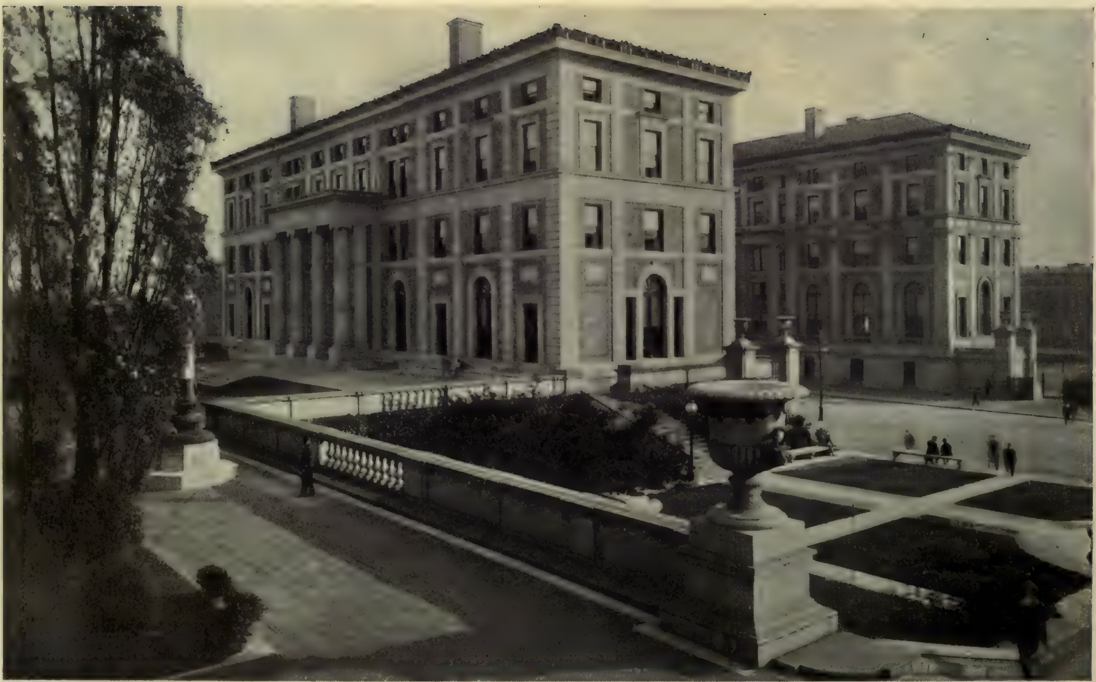
Before one realizes it the session itself is upon us, and some five thousand people plunge at once as if by some miracle into vigorous and complicated activity. To say nothing of the formal work in the 435 courses of instruction, each of which is conducted daily, there are religious meetings, music and drama, excursions seemingly to everything of interest within range of the city, organization and meetings of all sorts of student societies, State and other. I have before me the *Bulletin* of a single week. It includes thirty different meetings and other enterprises, including excursions to the New York Stock Exchange, to a newspaper office, to the latest transatlantic leviathan, to West Point and the Navy Yard, addresses by President Butler and others, lectures and dramatic readings, special chapel services, and open-air concerts.

Besides the students at work in New York, there are three hundred at the summer camp in engineering and others in mines, factories, law offices, and dispensaries. The old idea of a college vacation of four months has passed into history. In August come open-air plays, for which the University Green is admirably adapted. Then the choral singers present the oratorio they have been rehearsing. The baseball teams from the various sections of the country decide the championship. At the latest possible moment comes consistent devotion to the library to prepare for the impending examinations, and these once over the place is deserted as suddenly and as miraculously as it was filled.

During all this time the admissions officers have been busy with the interests of the fall crop of undergraduates. The deans have been preparing their annual reports and the executive officers setting their houses in order for the new year's work.

From the middle of August to the first of September is the quietest time of the year. It is used by the superintendent to give his buildings a thorough scrubbing, and by not a few scholars of our own and other faculties to do a quiet piece of uninterrupted research. After Labor Day the world begins to come back. Plans have to be made for the fall entrance examinations and for what are known as the " lame duck " examinations for old students. Men whose return depends upon some remunerative work are besieging the employment office, others are settling in the dormitories or in nearby boarding houses, patrols from the different fraternities are scouting about to look over promising new material. City boys back from their vacations are using the baseball field and tennis courts, and altogether the experienced eye realizes that the real rush will soon be on. Day by day more professors return to lead telegamic existences until their families return.

By the third week of September the dormitories are



Kent and Hamilton

well filled with men and women from all over the world —and the day when only three students in the entire institution lived north of Nineteenth Street in New York is within the memory of one of the trustees. Practically all of the teachers are at their desks and the general offices are overwhelmed with newcomers engaged in self-orientation. The new year actually begins on the last Wednesday of September, with exercises which overflow the Gymnasium. An address is made by one of the professors. Since it is purely a family party, he is not unlikely to poke fun at his colleagues; those, for example, " who mistake a part of archæology for the whole of education " were recently held up to derision. The visiting foreign professors usually make their bow on this occasion.

On the same day the juniors herd together the freshmen, to meet the already organized sophomores for the first of three contests held under the eye of the Student Board of Representatives and designed to infuse class spirit into the youngsters. Often these contests seem rather perfunctory, but sometimes they are amusing to watch. The losers in the tug-of-war, for example, are exposed to involuntary baptism from a hose played by the referee across the original center of the line. Susceptible freshmen are inveigled into purchasing reserved seats in the Chapel or are sent to the dean's office for their gymnasium towels, and after dark ambitious members of the two lower classes spend laborious hours in painting their numerals upon the fences, only to find that a janitor is detailed at this time of year to paint out these demonstrations just before dawn.

Lectures begin promptly on the following day, and before the week is out everything is running as smoothly as if there had been no interruption. The new students, and there are some two thousand of them to be assimilated each year, are under the special eye of their deans and advisers and of the men at the student building, Earl Hall. Receptions are held to bring the large number of men entering the upper classes into touch with one another and with representative students, and the various managers are dashing about among all the newcomers looking for promising recruits, while *Spectator* is daily urging them to deeds of devotion. The Extension classes are organized a week or so later, and the initial meeting of the Institute is held. In the meantime the several academic committees are getting organized for the winter and the first of the monthly meetings of the trustees and the faculties are held in the Trustees' Room. The new members of the staff and their families are being taken into the academic fold at an autumn reception and through the good offices of their departmental seniors.

Services are held daily in St. Paul's Chapel, which has an excellent student choir. An interesting feature of every religious service held in the Chapel is the reading of a prayer composed by the first President, Samuel Johnson:

> "May God Almighty grant that this College, happily founded, may ever be enriched with His blessing; that it may increase and flourish, and be carried on to its entire perfection, to the glory of His name, and the adornment of His true religion and sound learning, and to the greatest advantage of the public weal, to all posterities forevermore."

At Earl Hall, Bible study clubs are organized and opportunities for settlement and other social work made for the large number of men and women who volunteer for this purpose. One hundred and fifty men and women dined together there this year and discussed plans for the future. The foreign students are gathered for Sunday evening suppers in the home of the Cosmopolitan Club.

An interesting sight on these autumn days is the conduct of the prescribed classes in physical education in the open air on the South Field. Each new underclassman, by the way, receives a careful physical examination, at which heart and eye troubles are often brought to light for the first time. Two years later each student receives another set of measurements; in many cases the development under intelligent and expert guidance is remarkable. This oversight, and the availability of the University Physician, who had five thousand visits last year, do their share in maintaining a strikingly low average of absence from academic work through illness.

In October comes the first of the four meetings of the University Council, at which questions affecting the University as a whole receive consideration.

The students have by this time settled down into their ordinary routine and the atmosphere of steady, rapid work, which is a real characteristic of Columbia, is made manifest. Except for the relatively small proportion of idlers, the question in each student's mind is evidently not how little but how much he can get out of his intellectual opportunity. Jack, however, has no intention of being made a dull boy by an entire absence of play. The dormitories have begun to organize their informal hops, and their particular organ, the *Dorms,* appears on Sunday mornings. The existence of the fraternities is brought forcibly to the attention of the authorities by letters of protest from dwellers in the neighborhood as to the enthusiastic and protracted nature of their initiation ceremonies. The students of architecture are also prone to make night hideous to eye and ear by costume parades to mark the close of a period of industry *en charette.*

The basket-ball games and subsequent dances begin to attract their thousands to the gymnasium, and other athletic and musical activities are getting under way. The undergraduate papers are adopting their annual tone of condescending pity toward one another and the managers of all student activities are scurrying in eager quest for material, human and financial. The editors of the university annual, the *Columbian,* are busily collecting the multitudinous details which are to go into that handsome and useful publication. Very little of their time, it may be said in passing, seems to be devoted to proof reading.

In the undergraduate colleges the first round-up for the year is being made, and from the dean's office go out messages of congratulation, warning, probation, and even of farewell. The graduate students are setting the stage for their researches and the men in the professional schools settling into their stride.

At this time also comes the first meeting of the College Forum, where undergraduate teachers and students, on a basis of absolute equality and with delightful frankness and good nature on both sides, debate upon matters affecting the undergraduate life. For this year the question of primary interest is the transferring of responsibility for honesty in examinations from the University authorities to the students themselves.

By November, the public lectures and addresses given under the Institute or otherwise are in full swing. It is not unusual to have as many as eighteen of these addresses in a single week. To say nothing of the local supply of celebrities, nearly all persons of importance sooner or later come to New York, and students and citizens nearly always have an opportunity to hear them at the University—an opportunity which the males among the former too frequently neglect. There is a story of a visiting bishop who was invited by a student club to address its members, and who when he went to the appointed place found not a single soul; even the man who had personally tendered the invitation had found something he preferred to do elsewhere. At times, of course, the whole community decides simultaneously that it wants to hear some particular man—William James, for instance, or Henri Bergson. On such occasions the scene at the doors of our inadequate lecture halls takes on the aspect of a riot.

Before Thanksgiving comes the first of the impressive general University services held in the Chapel. The professors, instead of getting a brief holiday at this season, usually betake themselves to the meetings of some academic society at Columbia or elsewhere.

In December the student teas and faculty receptions begin. The freshmen and sophomores fight it out by proxy in a series of cane sprees, a sort of combination of wrestling and single stick. The sophomores also have their annual play, whose chief function seems to be to call attention by contrast to the really excellent performance of the University Dramatic Association, also held about this time. On Christmas night the men remaining in the dormitories light the yule log with becoming pomp and circumstance. This is one of the shows of the year and the reception hall of Hartley is packed with students and alumni. It is interesting to remember, by the way, that two of the best known American contributions to the literature of Christmas are from the pens of Columbia men. " 'Twas the Night Before Christmas " was written by Clement C. Moore of the class of 1798, son of President Benjamin Moore, and the famous editorial letter answering a little girl's inquiry as to the existence of Santa Claus, which appeared first in the New York *Sun* in 1897, was written by Francis P. Church of the class of 1859. In Hartley also the members of the department of music, from time to time, discourse sweet music on Sunday evenings in a delightfully informal manner.

Except for the last two weeks in August, the Christmas holidays are the deadest time of the year, academically speaking. The professors are many of them at meetings of learned societies or in concealment catching up arrears. The only active students are those on the Chess Team, who are usually engaged in winning the intercollegiate championship.

The absorbing interest in December, for the staff, is the Budget. The students, of course, know nothing about the worries of their teachers at this time. Indeed, it is extraordinary how little the average undergraduate knows about such matters. My own student days fell during the intensely interesting period from 1894 to 1898, and as I look back I blush to think how little I knew or cared about what was going on all about me. To come back to the budget, which for the sake of clearness it may be well to follow through its various stages. All through November the departments are busy with estimates of their probable expenses for the year beginning on the first of the following July, and as these expenses involve questions of promotion and other increases of salary, new appointments and provisions for research, it is a very interesting time for all concerned, and the president has so many visitors that he has hardly time to eat his meals. These estimates are finally finished and are sent by the departments through the president, and with his recommendations as to each item, to the committee on education of the trustees. Here they are checked by another set of recommendations, made by the deans on behalf of their respective faculties. This committee literally devotes days to study, and, as the sum-total of the various recommendations invariably far exceeds the ability of the trustees to provide funds, its work is necessarily a thankless one. The report of the committee is laid before the trustees in printed form on the first Monday in January, and is referred to the committee on finance, by which it is examined, not from the standpoint of the items, but from the standpoint of the capacity of the corporation to meet the total which it is proposed to spend. This second committee submits its report to the trustees at the February meeting, and the budget, with the recommendations of the two committees, is made a special order for the first Monday in March. When it is remembered that the budgets of the four corporations of the University represent a total of something more than three millions of dollars, it can be seen that a rather elaborate system is necessary, both to insure careful consideration and at the same time to see that decisions are reached early enough to permit the departments to make their spring announcements and when necessary to provide for new positions.

The annual meeting of the Faculty Club comes in January, when men who have dared to criticise the administration are elected to the house committee as a suitable punishment. Among the students, the debaters and other public speakers are aroused to action. Besides speaking themselves, the men interested in this side of undergraduate life conduct public-speaking contests for schoolboys. Later on the youngsters are enticed to the University, for proselyting purposes, by receptions and athletic contests. Swimming and hockey are to the fore and the crew squad is getting under way. The mid-year examinations, however, are drawing nearer every day and there is standing room only in the library. These examinations are held in the gymnasium and are closely proctored, a system rather irritating to many of the students, but effective in eliminating " cribbing."

At the beginning of the second term a new set of undergraduates has to be assimilated into the system, for the College admits nearly one hundred boys at this time. Shortly afterwards comes Junior Week, which has been built about the original junior ball that has come down from older days. This week is as close an imitation of the conventional performance at other colleges as the socially minded members of the class can succeed in making it, and they succeed better than some of their teachers, whose work is neglected, would like.

Lincoln's Birthday has, since 1908, been set apart as Alumni Day. This is a thoroughly characteristic Columbia occasion and attracts great numbers of former students to the University. In the morning classes are visited, and the afternoon proceedings begin with a serious meeting, at which matters of general alumni interest are discussed. Then there are various informal proceedings, the dominating spirits being the Early Eighties, that inimitable organization of the graduates of 1880-1884. The Early Eighties have all drunk deep at the fountain of perpetual youth and can be counted upon to appear in force upon any pretext, always accompanied by a band of three performers in Continental uniform. Their example has resulted in similar class groupings, but none of these have as yet succeeded in rivaling the original model. Later in the afternoon, everyone goes to the gymnasium to see the representatives of the younger alumni classes offer " stunts " in competition for prizes. Some of the stunts are really very amusing, others might seem a little tedious to a crowd less firmly determined to be entertained. Then there is a Jeffersonian beefsteak dinner in the commons, with speech-making tabooed, and the proceedings terminate by attendance upon one of the championship basket-ball games in the gymnasium. At Teachers College a series of important educational conferences are held about this time, at which more than one thousand of the alumni are present.

During the spring the departments are busy with arrangements for the new year and the professors in the graduate school are overwhelmed with the reading of doctoral dissertations, a necessary but not always an enlivening task; the undergraduates get a chance at the dean's house to talk over their futures with representatives of various callings, and the different professional and semi-social, semi-scholarly societies hold most of their meetings. These meetings are an important factor in the student life.

The elaborate 'Varsity Show comes off after a series of time-consuming but doubtless enjoyable rehearsals. The French and German societies give their plays. Vocal and instrumental concerts of varying degrees of merit are presented—the most interesting being an open-air inter-class song contest, held in the beautiful setting of the great court in front of the Library.

Some two hundred delegates from colleges all over the country come to Columbia at about this time to attend the meeting of the Intercollegiate Civic League. This meeting is followed by a trip to Washington, where the delegates are received by the President of the United States. At about this time also comes in presidential years the mock political convention. The whole college is organized into a nominating convention. There are speeches from all the States and the whole place buzzes with oratory and committee meetings and booms of various sizes. The students have a glorious time, and when it is all over they have acquired a grasp of the machinery of national politics that will last throughout their lives. Not long afterwards the students have their own politics to attend to in the elections to the Student Board of Representatives and to class offices for the ensuing year.

The best of the seniors in the professional schools are choosing among the various invitations for positions after graduation; for a man who has made his mark in a good professional school is nowadays a much-sought-after individual. The other more serious students are busy with fellowship and prize contests, and Avery Hall is lighted till long past midnight for the students competing for the intercollegiate contests in architectural design. In general, however, there is a lightening of the strain during the early warm days. It seems a good deal more natural, even for a professor, to stop to watch the baseball or track practice or a tennis match than to go on to the Library as one had intended. The abandoned ones even take a day off to see the crew row at Princeton.

Toward the first of May the advisers are besieged by students (who, in most cases, have until then left them severely alone) for help in working out schedules for the coming year.

The Sophomore Triumph is one of the social phenomena of springtime. It harks back to a ceremony established by the Class of 1866 and known for many years as the "burial of the Ancient"—Ancient Geography being the most detested part of the sophomore curriculum. It may be noted in passing that the chairman of the 1882 Triumph committee is now the President of the University. Of late years the Triumph, which is now over history and mathematics, had degenerated into rather a discreditable affair, but last year's celebration showed promise of a return to the old tradition. Another characteristic springtime festival is the Greek Games, held at Barnard College. If, by the way, I have given but little space to the student enterprises of Barnard and Teachers College, it does not mean that they are not both many and picturesque, but is due to the fact that the mere male in our community has but little opportunity to learn of them at first-hand.

Besides the regular "finals," a repetition of the February ordeal, oral examinations are held for candidates for the doctor's degree and for an honors degree in the College, the latter, with the *élan vital* of youth on their side, occasionally making a better showing than their more learned seniors.

The preparations for Commencement have long since been under way. The president, for example, who has to sign fifteen hundred and more diplomas, has been doing a few at a time ever since Christmas. From now on these preparations, however, become apparent. Bushes are trimmed and quick-growing oats sowed to conceal student shortcuts. The lame ducks are making one final effort to soften the hearts of obdurate deans and committees. For a dozen years or so the seniors have, in a baseball game, had their final chance to get the better of the faculty and have succeeded in doing it in less than half the cases. They are more successful in chess, in which field of activity the faculty enthusiasts are regularly trounced.

Since June of 1865, Class Day has been held separately from Commencement. Its features are good, but rather in the conventional mold, the most striking contribution being usually the class poem. " Stand Columbia," the university hymn, was first read as a class poem. Barnard has its own Class Day, and Teachers College an excursion on the Hudson and a lawn party. On the day before Commencement comes the Phi Beta Kappa address, always well worth hearing. President Lowell's first public announcement of policy after his election as president of Harvard University was made at a Phi Beta Kappa address at Columbia.

During the last few days the registrar's and secretary's offices have been working night and day, and absent-minded professors who have forgotten to send in the marks of candidates for graduation are bombarded by telegrams.

Before describing a Columbia Commencement as it is to-day, it may be interesting to look back over the history of the ceremony. The first Commencement was held on June 21, 1758, and was conducted, as the newspaper reports of the day record, with elegance and propriety. Seven degrees were granted. The ceremony was held at St. George's Chapel, and from then on various buildings in the city were used. It was not until Mr. Low's time that all parts of the University had Commencement together, and not until the opening of the new site that the exercises was held at the University. The Commencement of 1779 was honored by the presence of George Washington. At the first Commencement of Columbia College, 1786, the *Weekly Gazette* records the fact that " the Continental Congress and both Houses of the Legislature suspended the public business to support the important interests of education by their countenance and graced the ceremony by their august presence."

The Commencement of 1811, held in Trinity Church, comes down to us as the Riotous Commencement. A student on that occasion was refused his diploma because he declined to amend the language of his oration as directed by the faculty. He appealed to the audience and certain young alumni took his part. The disorder was so great that several of the participants were arrested and tried before Mayor DeWitt Clinton. This affair affected New York politics for many years. In the fifties again the Commencements were apparently rather disorderly. The regulations of the trustees permitting mild and decorous applause make it appear, at any rate, that applause was not always of this character. Indeed, older graduates tell me that the different fraternities used to organize violent claques to greet their members when they appeared on the platform. Since Mr. Low's time the students have been seen but not heard. Until the last decade of the nineteenth century the proceedings never seemed to have been of any particular academic importance.

The Commencement of 1894 was made notable by the presentation to Professor Drisler, retiring after a half century of service, of a gold medal struck in his honor, and that of 1910 was signalized by an extraordinary tribute to the retiring dean, Professor Van

Amringe, who, like Drisler, had rounded out a half century of notable service to the College.

To-day, Commencement is perhaps most notable for the effectiveness and punctuality with which everything goes off, and this is due to the fact that everything has carefully been thought out beforehand. Indeed, the committee in charge is supposed to have special influence even upon the weather, because there has been but one rainy day since the exercises have been held at the University. The amount of detailed planning and care necessary to bring the exercises to a close within the allotted period of an hour and a half can be appreciated when one remembers that more than sixteen hundred degrees and diplomas are granted. As an example of how rapid the recent growth of the University has been, it may be mentioned in passing that this number has doubled within the short space of half a dozen years. Every detail in the proceedings is checked by a stopwatch in the hands of one of the members of the committee so that any unnecessary waste of time may be eliminated in the future.

The first Commencement held upon the grounds of the University was in 1898. It was then expected that the gymnasium would be used for only a year or so for this purpose. It is still in use, however, and, considering that it was designed for a wholly different purpose, it makes an excellent assembly hall. The candidates themselves, however, now more than half fill it, so that it is quite impossible for every graduate to have even his father and mother present to witness his receipt of the degree.

An interesting recent experiment, which promises well for the future, is a general reception and garden party on the night before Commencement, with president and deans on a receiving line and a band out of doors. This gives everyone a pleasant evening and serves to relieve the bitterness on the part of those who, owing to the lack of space at the formal commencement exercises, fail to receive tickets therefor.

The proceedings, which since 1901 have been wholly in English, are conducted in a dignified and impressive manner, there being none of the " ragging " which occurs at an encænia at Oxford. The trustees, faculties, and candidates assemble in the Library building and march in procession through the grounds to the Gymnasium, already crowded beyond its capacity with parents and friends, where the formal proceedings begin literally on the tick of the clock. The president makes a brief address to those about to receive degrees, in which he gives them some very useful advice, which it is to be hoped they follow in after years. This is the first of some dozen addresses which he must needs deliver on this one day. After this the candidates for each degree are formally presented by their respective deans and their degrees are conferred *en bloc* by the president. Perhaps the most impressive part of this proceeding has been the administration by the late Professor John G. Curtis to the candidates for a degree in medicine of the Hippocratic Oath. It is hard to see who can be found to take his place; in any case his own eloquent translation of the oath is certain to be used:

Candidates for the degree of doctor of medicine—

You do solemnly swear, each man by whatever he holds most sacred:

That you will be loyal to the profession of medicine and just and generous to its members;

That you will lead your lives and practice your art in uprightness and honor;

That into whatsoever house you shall enter, it shall be for the good of the sick to the utmost of your power, you holding yourselves far aloof from wrong, from corruption, from the tempting of others to vice;

That you will exercise your art solely for the cure of your patients, and will give no drug, perform no operation, for a criminal purpose, even if solicited; far less suggest it;

That whatsoever you shall see or hear of the lives of men which is not fitting to be spoken, you will keep inviolably secret.

These things do you swear? Let each man bow the head in sign of acquiescence.

And now, if you shall be true to this, your oath, may prosperity and good repute be yours; the opposite, if you shall prove yourselves forsworn.

The candidates for honorary degrees, usually seven or eight in number, are then presented to the president by the University orator, and each degree is conferred with a summary of the qualifications of the recipient, as eloquent as it is terse.

After the formal exercises there are always several alumni gifts to be offered and accepted. Then comes the Alumni Luncheon, seven hundred or more men crowding into a room in which four hundred can be hardly accommodated with comfort. Some day a jostled millionaire alumnus may give us a suitable building on the spur of the moment. This luncheon is the occasion for wild cheering of everybody and everything. The recipients of honorary degrees make brief addresses (at least, they are asked to make them brief) and each newborn Columbia man invariably begins by an apt reference to his Fellow Alumni.

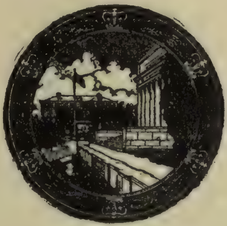
The president's admirable summary of the year just closing, which brings these proceedings to the end, is looked forward to by the alumni as perhaps the most important announcement of the year. I well remember the scene at the luncheon in 1903, when the president of the graduating class was discovered listening through a keyhole to Dr. Butler's announcement that he had been instrumental in providing the dormitories for which the alumni had so long been waiting. The boy wished to hear what was said, but feared the plaudits of the multitude.

After the luncheon everyone moves to South Field, where the younger classes, after the prevailing fashion of the day among American universities, garb themselves in weird costumes and perform to the edification of the onlookers. Then comes the baseball game, which the "Varsity" is seldom considerate enough to win. Then come a series of class dinners. After various experiments, more or less successful, the simplest method of entertaining the alumni after dinner has turned out to be to let them entertain themselves by singing, and hundreds of the alumni on each commencement night now gather on the steps of the Library and, to the accompaniment of a good band, sing to their hearts' content and to the enjoyment of the thousands of citizens that gather in the court below.

Columbia is rather notable for its academic pageants, and perhaps a summary of some of these other than the commencement exercises may be of interest. In 1837 there was a semi-centennial of the foundation of Columbia College undertaken on the initiative of the students. A bitter controversy between the trustees, faculty, and alumni prevented any celebration of the centenary of the founding of King's College in 1854. The double birthday, already referred to, makes these centennials occur with suspicious frequency. The centenary of Columbia College was celebrated in 1887, on which occasion many honorary degrees were granted and three or four thousand people were present. Three years later the inauguration of President Low was made the occasion of suitable academic ceremony. At the inauguration of his successor, eleven years later, there were present the President of the United States, the Governor of the State, and the Mayor of the City, all of whom had been students at Columbia. In 1896 the new site of the University and the six new buildings then erected had been dedicated.

Then came the one hundred and fiftieth anniversary of the founding of King's College. Perhaps the largest number of persons ever gathered together at Columbia was on this occasion at the reception of the trustees, when between fifteen and twenty thousand people were upon the grounds.

From Commencement, which is held on the first Wednesday in June, to the end of that month is the home stretch of the year. All of the administrative and many of the teaching officers are very busy with duties which, though not of particular public interest, must needs be attended to. The most conspicuous event of the month is the conduct of the examinations of the College Entrance Examination Board. They bring to the Faculty Club a number of readers from institutions all over the country, who fit as acceptably into our academic life as do the visiting professors at the Summer Session a fortnight later. When one views all the modern machinery and organization for the conduct of these examinations, it is interesting to remember that only threescore years ago the entire business of the admission of students was held in the small chapel by a triumvirate, the president sitting in the middle, the professor of classics on one side and the professor of mathematics, with his blackboard, on the other.



VIII

CONCLUSION

The Present Status. Factors Affecting the Future. Scheme of Organization. Externalism. The Burden of Proof. Need for Elasticity. Alumni Influence. Gaps in Present Offering. Restricted Space and Limitation of Numbers. Financial Support and Requirements. Points of Contact. Academic Co-operation. Other Relations. Local Ties. Responsibilities. Teaching. Research. Public Service. Outlook. The Place of the University.

EVEN a concluding chapter, which endeavors to give any forecast as to the future of an organization so very much alive as Columbia, must at the best be rather inconclusive. Stranger things have happened than that an earthquake should bring Macaulay's hypothetical New Zealander to the ruins of St. John's Cathedral instead of St. Paul's; and even if no catastrophe should come to the city upon which the University depends so vitally, no man can forecast what social and intellectual earthquakes the future has in store, nor how they will affect our higher education.

Our American universities owe their present character to four strains of influence: that of the English university, coming through the independent college; that of the intensely practical early professional schools of America, and that of the German university. The fourth element, while not so definite, is perhaps the most important of all, the intense national interest of our people in higher education. Columbia University has been splendidly endowed " by nature, by the advance of civilization, by the lives and bounty of men." In his book on Great American Universities, Dr. Slosson emphasizes the several factors with regard to Columbia. Its position in the largest city has given it the chance to become the greatest of American universities and it seems to be improving the chance. Its administration has been efficient, progressive, and courageous. He speaks also of the spaciousness and beauty of the buildings, of rapid development, amounting almost to complete transformation within fifteen years, and of the spirit of initiative and liberality in the institution as a whole. He believes the six-year combined academic and professional programs to be of great importance, and gives Columbia credit for having done more than any of the State universities, and more than all of the women's colleges for the education of women. He recognizes the honorable history and vigorous present of the professional schools, and throughout the institution the simultaneous service to scholarship and to the public. He concludes by saying: "Columbia University has the essential qualities for success, initiative, adaptability, and opportunity. If it continues to progress as it has in recent years, it is likely to take a position among the universities of the country similar to that of New York among the cities."

Can we, however, assume that this progress will be continued? Setting aside the chance of any physical or social cataclysm, and assuming practically the same environmental conditions as have prevailed for the past quarter century, there are, nevertheless, certain questions which must be faced by one who attempts to look into the future. Is the scheme of organization and government which now controls the University one under which it will continue to perform its best service to the community? Is its future conditioned by any definite lack in its present offering? How will limited space and the question of numbers affect the future? Is the financial support likely to increase or decrease? What of its relationship to other institutions of learning and to the community at large, particularly to the city of New York? Will it be able to maintain and develop its threefold function—teaching, research, and other public service? Will it, finally, be able to retain a clear untroubled gaze into the future?

There is to-day considerable petulance and some serious criticism as to the conditions of organization and particularly of emphasis in our American universities. It is easy to blame the *status quo* for the common frailties of human nature and we may dismiss much of the utterances of some of our academic pathologists, who appear to believe that whatever is, is wrong, and apparently read the Scripture verse somewhat as follows: " The present letter killeth, but our particular kind of letter would give light if we had a chance to enforce it." It should be remembered, too, that they are protected from actual martyrdom by the very fact that their immolation, even though this may be richly deserved for the crime of academic bad manners, would be immediately attributed to the existence of the awful conditions they imagine and set forth. One of the academic worthies called in by the Columbia trustees for advice, in 1857, gave this very sensible counsel: " If there be disagreement and dissatisfaction in the Faculty, I should never attempt to smother it. Let it explode—much the safest way—in some regular manner." Some rich malefactor with a grim sense of humor should found a university, appoint to his faculties only men of this type, and then let the world see how they would run themselves.

Even though epithets are not arguments, however, the presence in our academic community of those who wield the dagger of lath is not a bad thing. Experience shows that from time to time the right path may be pointed out as clearly with this instrument as with another. Some of the critics, moreover, are more temperate, and certain changes which they recommend have already been made in the organization of Cornell and are under consideration at the University of Illinois.

Professor Stratton of the University of California says that what he believes to be our evil conditions come primarily from a passion in our people for visible accomplishment, a love of dimension, an admiration for alert administration, for forceful public utterance, which things he groups under the term " externalism." In his judgment European universities have a constitution that might have come from some American political theorist. American universities are as though founded and fostered in some hotbed of aristocracy. He and other critics point to the organization of the German universities as a model to follow, and fear that the centralization of power and responsibility in the trustees and president here will ultimately kill scholarly and scientific initiative and enthusiasm and drive out of the academic life the very men upon whom the university must depend for its greatest usefulness. " Great personalities make great universities, and great personalities must be left free to grow and express themselves each in his own way if they are to reach the maximum of efficiency." Are these men right or are the men who believe like President Butler—to whom, by the way, the quotation above should be credited—that the secret of the success of the present system of academic administration in America is that the trustees and the president view the university as a whole and in its largest public relations, rising above the temporary interests of individual teachers, departments, faculties, or schools? "The university is a living and growing society of men, some of whom are charged with the direct responsibility for its policy and government and all of whom are charged with responsibility for the ideals and the character of the university and for its larger relationships to the public."

If we are indeed in danger from externalism, Columbia should consider her ways with care, for, free as she is from all external control of state, church, or even of her own alumni, any change in her organism must, if it come at all, come from within. There is no doubt as to the relatively high degree of her centralization among American universities, and it is possible that much of our academic machinery, perhaps necessary in the days of organization, might now be discarded. To quote Dr. Slosson once more: "The summer session has somewhat the same good effect on a university that a camping trip has on a city man. It shows how many of the necessities of life one can get along without. Entrance examinations, restrictions, classifications, regulations, segregations, conformity, positions, customs, and the like tend to lose their importance to one who has served through a summer session or two." Academic machinery should never be allowed to dominate the teacher nor to gain control of the imagination of the teacher and the taught.

Perhaps, too, the trustees and the president—who, by the way, are under no illusions as to their ability to make mistakes like other people—may keep more clearly in mind than they have sometimes done in the past the ever-present danger of forgetting, under the high pressure of our American life, to consult with those likely to be affected by any proposed change. When such consultation is held, say with regard to a new appointment, the result is that, without any formal responsibility for what happens, the professors of any academic field really appoint their new colleagues. While the technical responsibility lies with the president, he would never feel justified in going over the advice of those already in service in a field closely connected with that in which a new appointment is to be made. So far as the trustees of Columbia are concerned, it is certain that they have been at their best when dealing with general problems; at their worst when trying to control details of administration, particularly in the professional schools. That a man is a brilliant lawyer or a successful practitioner of medicine does not constitute him an expert as to the educational preparation for either of these professions.

As to any fundamental change in our academic organization, however, ought not the burden of proof to lie with the critics? We must not forget the extraordinary development of higher education in the United States under the present system, and the further fact that English and Continental universities, observant of this development, are moving toward some such system as we at present have, particularly in the constitution of the office of president, a peculiarly American invention. It may be asked also whether the reason the German universities can have their outward appearance of democracy is not because of the strong centralized Kultusministerium in the background, just as in America the colleges certificating for admission can maintain a "more generous than thou" attitude only because behind them stand either the strong examining colleges or a strong centralized system of state control of education. The historical background of the European professorship is so different from that of the American that a system which has grown up naturally here is more likely to be effective than one borrowed from across the Atlantic.

After all, does not most of the difficulty arise from two intellectual confusions, first between government and administration, and second between constructive administration and routine administration? Matthew Arnold said that he who administers governs, because he infixes his own mark and stamps his own character upon all affairs as they pass before him. He, however, was speaking of the British aristocracy; and to-day it looks as if their administration were resulting less and less in their government of the English people. When actual administrative work is done by faculty committees, as is so often the case throughout the country, it is performed usually inefficiently and always wastefully. The wastefulness is the more dangerous because it is not at first evident. Indeed, the superficial impression is that money is being saved. Of course, the cost must really be measured in what the members of the committee might be doing with the time and energy which they devote to tasks for which by temperament and training they are ordinarily far from being well fitted. So far as academic legislation is concerned, administrative people may chafe under the formalities and delays that precede faculty action; but in our moments of sanity we know that such action means building upon a broader and surer foundation. At Columbia a definite effort has been made to keep these fundamental distinctions clearly in mind, and generally speaking there is little loss of power through friction between the teaching and administrative officers.

It has been said, I think truly, that the university president's power is just what his personality and knowledge make it. If he can support his views by convincing reasons, he can get them accepted alike by departments, faculties, and trustees. If he fails in this, there is such a thing as an academic recall, and it is not infrequently put into operation. The president usually gets in the not very long run about what he deserves. He reaps where he did not sow, but he reaps the results of other men's foolish acts as well as of their wise ones. The president, as one of my colleagues has pointed out, is held responsible not only for the penchant for academic suicide which rages from time to time in university circles, but also for the inconsiderate longevity of many of those who occupy university chairs. As President Low used to say, his duties often seemed to lie mainly in the giving and receiving of pain.

One fundamental advantage of centralized control not always realized is that progress is necessarily made by concentration of emphasis upon one thing at a time, a procedure almost impossible without such control. It has been pointed out that our center of gravity lay from 1858 to 1880 in the College, from 1880 in the School of Political Science, and later in the other graduate schools. In 1902 it moved into the College of Physicians and Surgeons, then again to Columbia College, and it is now swinging toward Applied Science and other branches of vocational training.

Once in so often, also, any faculty will fall into a rut, and in nearly every case the first move toward improvement must come from without. It may vary in vigor from a delicate suggestion to a definite exercise of authority, but in any case it is a kind of step which the colleagues of the offending men are notoriously—and quite naturally—slow to take. Even among their own immediate colleagues, faculties are not particularly likely, as experience has shown, to ensure efficient teaching. Cases also might be pointed out of intolerance of teachers to one another, either within departments or directed against academic newcomers. Faculties also are prone not only to neglect much needed action in some directions, but to take hasty and ill-considered steps in others. In particular they have a mania for changing regulations, failing to realize that " three moves are as bad as a fire." All of which goes to say that teachers no less than trustees and administrators are but human.

Whether or not the present system of control checks the freedom of action of professors, it certainly does not check their freedom of speech. It has been said that there are just two classes of people in the community at the present time who are perfectly free to say out loud what they think—tramps and university professors. In the recent national campaign, all of the candidates for the presidency, including the socialist, had vehement and outspoken support from university chairs at Columbia.

Side by side with those who sincerely believe that trustees and president are spoiled, there are those who believe that professors are. These latter point to the fact that some of the very best work that has been done by scientists has been done by men not only engaged in teaching, but literally overburdened with teaching duties and denied every suitable scientific equipment, and they ask whether the increase in opportunities that have come to the professor of to-day has brought about a corresponding increase in important output. More than one member of a university staff coming from professional life has expressed surprise at the amount of academic leisure appropriated by some of his colleagues.

It seems to me that more important than any one scheme of organization is the preservation of elasticity, and since 1890 Columbia has possessed in notable degree this elasticity. It is not a bad thing for the pendulum to swing first toward centralization and then away from it. One has yet to find any device in a complex organization the benefits of which are not in greater or less degree counterbalanced by corresponding defects.

The problems of organization that arise are problems of living and growing matter, not of necrosis. A university is more often under fire for being ahead of the times than for being behind them and, as President Butler has said: "We are a result, in large measure, of the amazing and complex social, intellectual, and economic forces that play upon us. We can combine; we can check; we can accelerate, we can assist, we can forward, we can retard; but I question very much whether this stream of academic progress could be dammed up and checked into a lake or stagnant pool by any power."

Assuming, as one fairly may, that all concerned—trustees, president, and faculties—are actuated by a desire for the general good rather than for personal glory and aggrandizement, it would appear to be wiser to endure the evils that we have than fly to others that we know not of. This does not mean, however, that individual steps should not be taken along the lines desired by certain professors. It might be well, for example, to try the experiment of having a certain proportion of the trustees elected upon the nomination of the faculties, as a certain proportion is now elected upon the nomination of the alumni. I doubt whether anything particular would happen, except that the minds of some of our colleagues would be eased. It would be well also to develop some organic relationship between the departments and the trustees through the University Council, a link that is now lacking in our system. This would bring the men who do not sit in any faculty closer to the center of things.

Happiness and content on the part of the teaching staff are surely factors of the greatest importance in the welfare of the University. The teachers with the adult members of their families make a community of nearly two thousand souls, and, whether it is advisable to do anything to change the present constitutional system, there is no doubt that certain social developments are needed. The Faculty Club is to-day one of the great powers in the institution, and the women have recently organized a similar club of their own. The President's House is doing much as a general social center. Further social opportunities for the men and women of the community are, however, needed, notably a faculty apartment house.

If one may judge by the experience of other institutions, one factor in the organization of Columbia University likely to become more and more prominent is that of alumni control. This is in many cases not constitutional, but it is none the less real. No one can overestimate the value of alumni loyalty and interest, but these do not come without bringing problems with them. Even the eminently desirable activities of alumni in bringing students to their own Alma Mater is in many cases not to the interest of the boy or the college. The whole business of the stimulation of student attendance is, as President Pritchett has been the first to point out, now being overdone. There is not as yet sufficient emphasis on the point of view which regards collegiate or professional training coldly and deliberately as an investment on the part of the student. As some of our sister institutions have found out, there is a real danger of over-emphasis by the alumni on college life, and particularly conventionalized college life, and an unwillingness to let students and teachers work out their own salvation. The *Quarterly* a few years ago referred to

> "what Lowell might have called a certain condescension in alumni—particularly in the assumption that the university administration, as such, is in some way incapacitated from appreciating the value of the extra-curricular factors in the training of its students. There is no question that the university needs and will always welcome alumni criticism, be it favorable or otherwise, and perhaps we are rushing unwisely to its defense; but it seems to us that the judgments of alumni with regard to their *alma mater* would be of even greater value than they are at present, if the attitude of the alumni were always to reflect an appreciation of the following two factors. The first is that, after all, alumni do not cease to be alumni when they return to their *alma mater* as officers. More than a quarter of our professors were undergraduates at Columbia, many of them men whose contributions to the extra-curricular educational factors were not inconsiderable. . . . The second thing is that the university must of necessity insist that its first business is the efficient carrying out of its programs of study. The other things are important, and no one realizes this better than the university, but they simply could not exist at all except as adjuncts to a central unit of academic work. In the questions that are constantly arising as to the wisest adjustment between this central unit and other student interests, the university officers may sometimes err on the side of over-apprecia-

tion of the academic aspect of things, but, after all, they may be counted upon to approach these problems with the broadest interests of the university, as they conceive them, at heart, and with no inconsiderable knowledge of both sides of the question. It has been the experience of practically every institution that decisions which at first seemed to the most loyal of alumni to be serious errors have, in the fullness of time, come to be recognized as wise and far-seeing advances.''

Let us now consider the conditions in its present offering which might limit the continued progress of the institution. An essential element in the development of a great university is the interrelation of its several parts, one to another. Columbia is fortunate in being unusually well balanced, both in her covering of the various fields of knowledge and of her relative strength in each. The statistics of American universities show that, although Columbia is by far the largest in total numbers, she is the largest in only two particular schools. Teachers College, indeed, due to its comparatively new and unoccupied field, and to the forehandedness of its administration, has tended to grow out of proportion to other parts, but the rivalry of the State universities in the field of education and its own limitations of space are likely to make this condition a temporary one.

There are, however, certain definite gaps in the offering of the University, and, as the dyspeptic said about the digestive juices, the most important components are those which are not secreted in sufficient quantities. The Faculty of Pure Science has recently been shot to pieces by calls to presidencies and other causes and has not yet resumed its normal strength. Funds are needed for research in various fields. Geography needs more attention, and Japanese and Russian are at present wholly neglected. No one realizes better than our medical faculty that at present the doctor from the small city or the country is more likely to go to Chicago, Baltimore, Boston, or St. Louis—to say nothing of Rochester, Minnesota—than to New York for opportunities for professional inspiration and enlightenment. It is, therefore, unlikely that the present relative weakness in facilities for post-graduate medical training is likely to be permanent.

Columbia's most fundamental lacks, however, are in the field of Fine Arts and in the support of the Library. The organization of the different elements now here, and the addition of others to make a real school of fine arts, has been under discussion for more than a decade, but the problem has not yet been satisfactorily solved. The scheme of co-operation with the National Academy of Design in 1905 proved abortive, and to-day Columbia makes no pretense, in spite of excellent work by a few individuals, to represent adequately the art element in life and in civilization. It must be remembered that as yet we have no traditions of art in this country. Our Puritan forefathers came here believing that they had left art behind as one of the luxuries that were to be condemned, but, as Professor Robinson has pointed out, art is not to be regarded as one of the luxuries of life, and it has never been so regarded among the people among whom it has flourished. Weakness on the æsthetic side is indeed common to all American universities, and the first to remedy the defect will be taking a step of great importance.

During the past twenty-five years the sums appropriated to the care of buildings and grounds (not for construction) have increased more than twice as rapidly as have those for the library. As a result, in spite of its half-million volumes and in spite of many books of particular interest and of special collections dealing with definite topics, the library as a whole is not one of the strongest features of the University's equipment and there is nowhere that the trustees would more gladly welcome an endowment than for the purchase of needed books.

A related weakness is the absence of facilities for scholarly publication. The example of Chicago and more recently of Yale and Princeton, to say nothing of what our own University Press has done under its present handicaps, should call attention to what might be accomplished by this Press if it were adequately manned and handsomely endowed.

In certain fields, where Columbia now stands hesitatingly and ineffectually, she should either go forward vigorously, if this can be done without undue cost to her more firmly established interests, or she should withdraw. Such fields are landscape architecture, agriculture, and forestry. We have gone a little further in public hygiene and preventive medicine, but not far enough. The strangest fact is that, in the greatest commercial center of the new world, no proper provision has been made by its largest university for commercial education. Threescore years ago President King strongly urged the establishment of a school of commerce. One was announced in 1899, to be conducted in co-operation with the New York Chamber of Commerce, but to-day work in this field, which is growing hourly in importance and significance, is confined to extension classes.

Columbia moved to its present site with the fallacious expectation that it would there have elbow-room for many years to come. Less than ten years ago it was possible to take a photograph from the northwest which showed every one of the University buildings at Morningside. Owing both to the development of the surrounding property in the erection of large apartment houses and the growth of the University itself, such a picture could to-day be taken only from an aeroplane. This hemming in on all sides of the University is likely to be an important factor in the future limitation of its students. This is particularly true since certain additional buildings are still urgently needed. Playgrounds and a stadium may be provided elsewhere, but dining halls and other buildings for students and larger assembly rooms must come upon the present site. Something of course might be accomplished by an even more intensive use of the present buildings. Teachers College increased the use of the Household Arts buildings fifty per cent. by an ingenious rearrangement of its schedule.

It is true also that certain parts of our work might be moved to other situations in the city or elsewhere, but the results of having the Medical School three miles away, and the very moderate success of the experimental extension classes in Brooklyn, Newark, and other centers, do not indicate the desirability of further decentralization.

Other factors than the limitation of area will combine with it in making the problem of limitation in numbers an ever-present one. The recent growth of universities, and especially universities located in large cities, is, as Professor Calvin Thomas has pointed out, a world-wide phenomenon due in part to complex social and economic causes which are beyond our control or direction. Perhaps the greatest single factor is the constantly broadening foundation caused by the rapidly increasing numbers of those who graduate from the public high schools.

It should not be impossible to solve in part the problem of limitation of numbers, if each separate unit of organization could find some way to pick out those best worth training. Particularly in the professional schools, furthermore, one may count upon sudden and often inexplicable reduction in the numbers of those desiring to enter any particular calling. This has already happened in medicine, which like law is in a measure engaged in attempting to remove the reasons for its existence, and it is now operating in various branches of engineering. Indeed, the percentage of growth in the entire institution from 1912 to 1913 was only six and one-half per cent., a much lower rate than that of the University of California, for example, which would indicate that our period of very rapid increase has come to a close, and that, so far as the present offering is concerned, Columbia's position as the most largely attended university is likely to be but temporary. Contrary to the general belief, this would be welcomed as a relief rather than deplored as a disaster.

The real difficulty will lie in the limiting the number of units; for, even if some of the particular fields mentioned above are abandoned, others are sure to arise and demand academic recognition. Dean Russell has pointed out that any vocation with intellectual possibilities in which specialized knowledge is rationally, ethically, and skillfully applied in practical affairs, becomes *ipso facto* a profession. Some of these new professions can now be seen actually in the making, as, for example, that of the specialist in governmental administration. Many of these new fields would indeed involve little or no extra expense, but merely a regrouping of existing facilities. It has been suggested, for example, that Columbia might wisely follow the example of London University and establish a laboratory of eugenics, through the combined force of its biological, medical, and sociological departments, and the co-operation of its theological allies. While up to a certain limit a university is blessed in so far as it sows beside all waters, there exists a real danger lest an institution should spread itself so thin as to become a polytechnicum rather than a university, a change which would affect not only the institution as a whole, but its every part. The solution would seem to lie in a dividing up of the field by agreement among different institutions, local and national, a matter to which reference will be made further on.

The time will surely come when the question of removing certain existing parts will come up and the proposal to cut out the undergraduate colleges will undoubtedly be among the first to arise. The undergraduate college, however, is the most characteristic feature of our American system of education. It has, particularly in institutions like Columbia, a vital function in tying the whole institution together in many ways already pointed out, and vigorous and enthusiastic youth has its lessons to give as well as to learn. The honors courses seem to furnish a clew to the possibility of maintaining in a university, no matter how large and overcrowded, a place for earnest undergraduates, not grinds, but boys with red blood, of real intellectual curiosity and promise.

What can one foretell as to the financial support of an institution like Columbia? Professor Munroe Smith has pointed out that " what the rich men of the country hold, they have and hold by the aid of the university teachers of the natural and social sciences. These ask nothing for themselves but the opportunity to serve the country and the world in serving science. They desire no retaining fee to induce them to tell the truth as God gives them to see the truth. But they feel that every rich man owes his tithe to science, and that this tithe should be paid to the temple of science, the university.'' Will Columbia continue to get its present share of these contributions?

Its support has come in the past primarily from the citizens of New York, as has been already shown. Thus far experience has confirmed Mr. Low's statement of twenty years ago that he esteemed it a part of the good fortune of both city and university that the time has come when Columbia must be a constant, importunate, and successful beggar. It must not be forgotten, however, that the additions to our prosperity thus far have in many cases been of such a character as to increase expenditure far more than to increase income and that our endowment is very unevenly distributed. Upon this subject President Butler has said:

> '' The ethics of academic giving is as yet an unexplored field. It offers many and inviting problems to the student of morals and of public policy. It would be very easy, by the exercise of ordinary business judgment, to make the millions now given each year for education in the United States many times as productive as they are. New and unnecessary institutions are established out of the vanity of one man or the ambition of another, when the money to be devoted to their establishment would be at least twice as productive if put into hands already tested and experienced and added to the resources of some well-established institution of the higher learning. Funds given for special purposes would almost always be more wisely spent if given to promote the general ends for which a university, a library, a museum, or a hospital exists. But

it takes men and women of large vision and broad sympathy to see this."

The recent grants from the General Education Board and the Carnegie Foundation, made to the Johns Hopkins and Vanderbilt Universities respectively, encourage one to feel that Columbia and other urban universities, with their knowledge of the public need and the skill in meeting it which has come with long years of experience, may receive as time goes on greater opportunities to co-operate with organizations of this character, as well as with individual donors, in the effective use of funds devoted to the public welfare.

One financial factor has been clearly set forth as to Teachers College by Dean Russell in a recent report, which applies with practically equal force to every other part of any ambitious institution: " If we maintain the standing of our instruction, expenditures are bound to increase automatically, because so many of our staff are still young in point of service and rightfully expect an annual increase in their salaries. The development of our field and the growth of other schools force us to keep our work to the front, and that tends annually to increase the cost of maintenance. Instead of larger classes and fewer professors, we must have smaller classes and more professors."

In spite of strong probabilities of continuous support, Columbia must nevertheless be seriously upon its guard against over-development. We must bear in mind also the rapidly increasing support and wealth of the State universities. Another factor is the organization of separate institutions for research, and still another the ever-present possibility of the establishment of a national university in the city of Washington. To borrow a phrase from modern business, Columbia must always have a care lest some development in the educational situation over which she herself can have no control should find her " over-extended."

In the old days Columbia's points of contact with the outside world, even the outside academic world, were very few. Before the new blood called to the institution as a result of the 1857 Report, one must, I think, go back nearly a century to Myles Cooper to find a man specifically called to New York to take a position in the institution, and from 1857 on but few were called until Mr. Low's time. To-day, of course, there is a constant interchange of individuals, perhaps most notably and significantly for us in the summer session. Our relations with other institutions would be greatly strengthened, however, by an adequate appointments office which would not only put our younger men in positions of strategic importance but keep us informed as to what those already placed were doing and learning elsewhere.

Columbia has never attempted to dominate or patronize nearby institutions. Indeed, for most of her history she has not been in a position to do so. She has been successively outstripped in numbers by New York University, Union, and Cornell. In view of the vigorous existence of these, and of Syracuse University, Columbia has grown from a local to a national institution without the intermediate stage of State leadership.

Columbia's different systems of exchange professorships have strengthened the ties not only with foreign institutions, but with local ones as well, for of the Roosevelt professors thus far appointed more than half of those nominated by Columbia have come from Yale, California, Virginia, Wisconsin, and Chicago. We are however too prone to forget that Columbia, though relatively venerable among North American institutions, is just two centuries the junior of the University at Lima. In contrast to the progress of the University of Pennsylvania in this matter, the whole field of relationship with South America has thus far been neglected.

Among the advances for the future in American higher education would seem to be a clearer realization that co-operation is wiser than rivalry, and that more conscious and deliberate tying together of its different elements is desirable. That universities should consciously work together is important, both in order to avoid waste and duplication of efforts and funds, particularly in fields appealing to comparatively few students, and also as an antidote for that deadening provincialism which develops and flourishes in places where one would least expect to find it. Although the Yale-Columbia scheme for co-operation in foreign service fell through, this furnishes no reason why other attempts should not be made. A specific field lies in the extension of the principle of the combined college and professional course so as to include the small independent college, which is at present seriously penalized in this regard.

There is now in existence an association of American universities and a similar association of the State institutions, but their influence thus far has been disappointing. Indeed, more has been accomplished by meetings of men as individuals in learned societies, and in such bodies as the College Entrance Examination Board.

Perhaps the line of progress toward closer relations among our American institutions will be found in individual acts of consideration. As early as the Park Place days, Columbia threw open her doors to the struggling College of Pharmacy and offered facilities in certain fields to the students of Annapolis, an invitation only just accepted for the current year, when eighteen graduates of the Naval Academy are studying in our engineering laboratories. She has made welcome presents of books to Virginia, William and Mary, and Toronto, when the libraries of these institutions had been destroyed by fire, and during the typhoid epidemic at Cornell, a few years ago, our classrooms and dormitories were thrown open to the students of that institution.

More might be done also to encourage co-operative work among students by schemes like the joint summer school of mining practice, tried a few years ago, and the present inter-university competitions in architecture. The example of the German universities has led to attempts to stimulate migration among graduate students, but thus far these attempts have been neither vigorous enough nor intelligent enough to produce important results—which is unfortunate, for it is easier and less expensive to move individual students than to move the professors with their books and laboratories.

What are to be the relations of the University with the non-academic world? The liberal arts had their origin in the sharp antithesis between the life of leisure and the sordid duties of the slave, and even in Matthew Arnold's day the university was regarded as the home of lost causes and forsaken beliefs and unpopular men and impossible loyalties. It is, however, no longer regarded as necessary or desirable to keep our universities unspotted from the world. Intelligence, to quote Professor Woodbridge, is not given to man to be hidden away like the talent in the napkin, in fear lest it be soiled by the increment its exercise would earn from a material world, and instead of shunning, as Arnold advised, the crudity and grossness of utilitarianism, the universities are important factors in establishing a new and higher utilitarianism or, as it is called at Wisconsin, a utilitarian idealism.

From the other side, the world without has for some years looked upon the university in a new light, and one college professor leaving the White House as another enters it is not to-day the extraordinary phenomenon it would have been a generation ago. It is significant that the university is being constantly selected by organizations and individuals having no personal or official relations with it as a means of perpetuating the names of public servants like Waring, Curtis, and Gilder, and that funds are being volunteered to it for such purposes as research in advertising and in road-making. It is characteristic, too, that Joseph Pulitzer turned to a university to administer the striking series of prizes, amounting to about twenty thousand dollars annually, for meritorious work in various fields of practical endeavor, for which he made provision in his will. Society, too, is now calling on its own initiative for training in new professions and vocations, instead of having it imposed from above. All in all, there is no country except perhaps Scotland where the universities come so close to the people as in America. A writer of the distinction of Arnold Bennett has never seen the inside of an English university. We can hardly believe that an American of the same caliber would not inevitably have come under the influence of one or another of ours. The danger with us, indeed, is not so much of aloofness and arrogance as that the universities may forget their function of leadership. It has been cynically pointed out that modern journalism is an example of giving the people exactly what they want. I think it was von Holst who said that the preachers of the doctrine that a good average is all that a plain democracy needs are the worst enemies of democracy.

No argument is needed to prove the desirability of the closest relations between the urban university and the city of its home. Columbia is what New York has made it, and what she will be depends more than upon any other single factor upon her future relations with the city. Dr. Slosson has said that the University of Chicago might be anywhere, but Columbia, body and soul, is so thoroughly characteristic of New York City as to be quite inconceivable elsewhere. Its relations and inter-relations with the city are more like those of the Sorbonne in Paris than those between any other university and city. It has already achieved in large part the ideal relationship which the Royal Commission is trying to accomplish for London University.

At the dedication of the site in 1896, Abram S. Hewitt, one of eight mayors Columbia has furnished to New York City, said: "Let it be remembered that we are here not to dedicate the building alone, but also to dedicate the responsibilities and duties of advancing civilization, the wealth, the energy, and potentialities of millions of men who will, in the ages to come, constitute the population gathered around this center of light and learning." The advantages which the University may draw from its position in the city were never better summarized than in an editorial in the New York *World* twenty years ago, written to urge the city to furnish the funds which Columbia needed to establish itself in its new home:

"A great city like New York, and New York more than most great cities, holds educational possibilities which can be had nowhere else, and which can only be turned to account by a great university. As the center of the nation's activities—industrial, financial, and intellectual—New York has drawn to herself the very strongest men and the most conspicuous illustrative examples in every department of endeavor.

"The great hospitals are here, and the great surgeons are in attendance upon them. Our law courts deal with the largest and most complex questions. The student of economics has here the commerce and the finance of the world to study. The lecturer upon engineering or architecture has here the best illustrative examples with which to make his teaching effective. The student of literature studies in the midst of the creative literary activity of the continent, and, with his fellows, the students of history, philology, or what not, has access to some of the noblest reference libraries in the world. Here the arts of music and the drama have their best exemplification. Here are museums and galleries of the first order."

Twenty years have brought even greater opportunities. No other university center offers such a variety of phenomena, such diversity of interests and such views of social organization and progress. Recent statistics show a collection of books in New York, Brooklyn, and Newark of more than five and one-half million volumes, to say nothing of the extraordinary private collections, and of the fact that New York is now one of the great book marts of the world. It is also one of the greatest engineering centers and the building of the allied societies is the headquarters of fifty thousand engineers. The city has become a veritable museum of architecture and, what is more important, its practicing architects are showing the greatest interest in training for their profession. But it is needless to go into further details.

What the University owes to the city financially, both directly and by the increased value of its real estate, has been reiterated, doubtless to the point of tediousness, throughout these pages. Its growth in numbers is perhaps primarily due to the growth of the city, both in furnishing a local supply upon which to draw and because it is becoming more and more generally recognized to-day by those outside it that the great city itself gives a view of life that is no small part of a student's education.

With these advantages come corresponding responsibilities on the part of the institution. The first of these is that the latter must be where the city can get at it. As early as 1770 the American Farmer, in his famous Letters, regretted " that the new Academy had not been erected far away from the city, in some rural retreat, where the scholars had been far removed from the tumults of business and the dissipations and pleasures that are so numerous in large cities." The question of becoming by removal to the country a daughter of Mary, to adapt Kipling's figure, rather than a daughter of Martha, came up again and again, perhaps most acutely at the time of removal from Forty-ninth Street, but Mr. Low then reminded the trustees that Columbia had a distinct duty, historical and sentimental, for those who do not want to go from the city for their education, or who are unable to do so. Humanly speaking, the development of the present site has permanently settled the matter.

In other ways the University is doing what it can to repay its obligations. Its buildings have been at the disposal of the city for scientific tests, and of the citizens as a meeting-place for any serious body of persons. In 1890, Mr. Low found that eighteen societies then used the College buildings for their meetings, and not many years later the total attendance upon such meetings in

University buildings had grown to over sixty thousand a year. No attempt is made to limit its services to those from whom it receives pay; and, as has already been pointed out, no one pays the full cost of what he receives. The undergraduate curriculum has been modified to articulate with the public school system and professional training has been provided to meet specific local needs as they have arisen. The extension classes have been maintained primarily to meet city needs. As early as 1895 the members of the Faculty of Political Science debated in public on the East Side questions of general interest to the community. The teachers of French and German have for many years been in close touch with the New York citizens interested in these literatures. The Deutsches Haus contains an academic bureau of information, and similar provision will doubtless be made in the Maison Française. Columbia has been instrumental in founding, has fostered, and now provides permanent homes for various useful organizations, notably the Academy of Political Science, the American Mathematical Society, and the College Entrance Examination Board. The Public Library is relieved from purchases in certain fields through knowing that these will be looked after for the city by Columbia. It has been the policy of the trustees to put the scientific collections where they will do the most public good. Our herbarium is housed at the Botanical Gardens, certain of our fossils at the Museum of Natural History, and rare Spanish books with the Hispanic Society.

All these are but typical examples of the desire of the University to pay its debt to the community, but even to pay the interest on that debt requires that new ways must constantly be found and developed. One way, which like many another is reciprocal in its effect, is to teach the city and the citizens to do even more for it and for education in general. Every dollar that is spent in New York can be made an educational resource, if the persons who spend it have been properly trained. We hear a great deal about the education of the poor, but we must not forget the education of the rich. When rich men build houses they must be taught to make them architecturally educative. When they buy pictures and books they must be taught to have them available for people who can profit by studying them. When they establish factories they must see that these teach the best forms of industrial enterprise. When they buy theaters and newspapers they should do so with a far keener sense of their public responsibilities than is generally the case to-day. A man who gives largely to any public institution should rightly have a good deal to say as to how the money should be spent, and he should withhold his aid from any institution, no matter how useful in itself—church, hospital, library, or what you will—lacking in its duty in the broad field of education.

At first the only task of universities was to teach; with the nineteenth century came the obligations of research, and with the twentieth the problems of general service to the community. The first two are of course inherent in the third, as they are forms of public service of no mean order, but as matters of emphasis these may be regarded as three separate functions. What are the chances that Columbia will be able to carry on successfully this threefold obligation?

Teaching is no longer regarded as the mere providing of facts. To quote from an editorial in the University *Quarterly:* " The object of modern teaching is not to make votaries, as many people suppose, but to make thinkers. Probably the best way to convert an average class to free trade would be to teach protection in a dogmatic spirit.'' The teacher's aim is to guide the student systematically to ever-growing independence in thinking. Columbia has always had her great teachers, but with her rapid growth the question of insisting throughout upon skilled teaching—and teaching is an art —has until very recently been rather neglected. If a professor happened to be a good teacher, so much the better, but, if he didn't, no one but the students found it out, and in the professional and other prescribed courses they had to sit under him, whether or no. Some of the examples of thoroughly bad teaching collected by Professor Pitkin, when he was preparing a plea for the desirability of really teaching the young instructors of a university how to teach, are enough to make one shudder. Particularly in the laboratory sciences, inexperienced youngsters were put in charge of large squads in important subjects, and bad teaching of the sciences is quite as dangerous educationally as bad teaching of the classics or of any other subject. Probably the same difficulty may be faced with the social sciences in the future, but at present the novelty of laboratory methods here keeps things up to the mark.

President Butler has cried out as to the difficulties of making any attempt to improve the teaching of men already in service:

> " There is unfortunately no public opinion, either within a university or in the community at large, which will sustain the displacement of a teacher in school or in college simply because he cannot teach. If he is a person of good moral character, of reasonable industry, and of inoffensive personality, his place is perfectly se-

> cure no matter what havoc he may make in the classroom. It is this inequitable security of tenure, the like of which is not to be found in any other calling, that attracts to the teaching profession and holds in it, despite its modest pecuniary rewards, so much mediocrity.
>
> "This is not so much a condition to be criticised as a fact to be reckoned with. Unless an ineffective teacher can be roused or stimulated into relative effectiveness, it will probably be necessary to subject one generation of college students after another to his incapacity until death or the age of academic retirement comes to their relief."

As a matter of fact, in many cases the trustees can and do appoint a stronger man to a chair in the same field, and in such cases the students can be counted upon to do their part. It has also been seriously suggested that by the adoption of some position like that of the docents in the German universities (where the junior teacher's income depends upon the number of his students) the question of stimulating emphasis on teaching might be solved. The important thing, however, is to appoint no new men to higher positions, barring geniuses, unless they are teachers of proved skill and devotion, and to give the younger men an opportunity to learn their trade, for teachers are made as well as born. Their own departmental seniors can do much, and in some cases are doing a great deal, but it is not to the credit of the University that thus far the opportunities of Teachers College have not been adequately enlisted in this matter.

In professional courses, Columbia has one great advantage, an advantage however that needs careful watching. Ordinarily it is only in the city that it is possible to get men of eminence in the several professions to

Alma Mater

devote at least a part of their time to academic duties. In certain fields this part-time service is absolutely necessary. In medicine, for example, the student is improperly trained, if his experience is limited to the study of the inflammatory and organic diseases usually seen in ward service. He must learn from men in general practice about the various functional disturbances which are arising from the strains and worries of the twentieth century. In the past, however, too little attention in making these part-time appointments has been paid to the actual skill and interest of the professional practitioner in teaching itself. In a great city, however, the supply is practically unlimited, and, if sufficient time and care are taken, the right man can always be found.

With the appointment of deans and the establishment in each faculty of a working committee on instruction, the general average of teaching has been improved markedly, both through insistence on smaller sections and in care as to new appointments. In certain cases, too, as in the undergraduate honors courses, and more recently in journalism, Columbia has broken away from stereotyped methods. Much has also been done indirectly toward bringing about a general recognition in the University that academic *kudos* in the form of promotion or otherwise depends more upon teaching service than was formerly supposed to be the case. The future may very possibly show that we are now doing too much teaching all along the line, but, however that may be, the realization is coming that whatever teaching is done should be of the first order, and that is the important thing.

Closely related to teaching is the whole question of the stimulation to good work through competition. This spirit of competition is already well developed in the professional schools through certain coveted positions (usually opportunities to do additional work) such as the *Law Review*, the prosectorships and hospital interneships in medicine, and also by the practical fact that a man's first appointment, and indeed his later professional advancement, depends in large measure upon the judgment of the faculty as to his relative position among his fellows. It is strong also in Barnard, and is growing stronger in the College, where last year nearly a third of the class had records that rendered them eligible to Phi Beta Kappa election. It is weakest in the graduate school, as is the case throughout the country, where too many of the students have been spoiled by subsidies, and idle away their time in the fond belief that they are doing research, and where too many others want a degree merely as a sort of intellectual whitewash.

The good teacher teaches far more than his subject, and can even make some impression upon those three cardinal weaknesses of American youth—careless manners, intolerance, and a lack of a sense of responsibility. By suggestion rather than precept he can also influence the student to make provision for the profitable employment of his leisure. Culture, as has been pointed out, is not a serum designed to furnish immunity for the future. Success in a business or professional career is a barren triumph if, when the means and time and money to gratify a man's individual tastes have come, he finds himself without intellectual or æsthetic tastes to gratify—and many a college student who is to-day devoting all his moments to the mastery of the highly technical but profitless gossip and statistics of the side lines will come to realize this.

This is the day of emphasis on social consciousness, and, as a university lives primarily in its graduates, one of its primary teaching functions, and also one of its most important acts of public service, is to make each alumnus realize as he goes out into the world that his obligations are greater than his privileges, and more important. What Columbia has already done in this way is probably underestimated, owing to the habit in America of giving all the credit for a man's accomplishments to his first college. The university, where he goes afterwards and where he probably receives much more serious intellectual stimulus, is seldom considered. In the past this part of the teacher's influence was largely unconscious, or at any rate unorganized, except on the strictly religious side, but to-day the ethical element in the practice of law is being emphasized deliberately, as is the social responsibility of the engineer and doctor. The percentage of graduates of Columbia University who enter the profession of teaching itself is rapidly rising. Indeed, within the six years between two recent general catalogues it rose from four per cent. to thirty-three per cent., and is doubtless higher to-day. And no subject touches life on so many sides as teaching or, to quote Professor Dewey, " brings to itself such a wealth of material combined with such a stimulating outlook upon the past and the present of humanity." Not a few of the gifts that have come to Teachers College have come from practical idealists in the world of affairs, whose primary interest was in social betterment, but who realized that the surest step to this end was in the better training of teachers.

In general, the undergraduates need little stimulation to interest themselves in social matters. Not the least of the reasons why the country boy who intends to amount to something takes his college work in the city is because of the opportunity which he can get of studying at first-hand the social problems that are rapidly becoming the crucial question in our American civilization, and he studies them not merely as an onlooker, but as an active participant. Dozens of the undergraduates are now doing social work in settlements, churches, and other centers, and find this to be not the least important part of their education. To-day practically every undergraduate speech, where the student selects his own subject, and every essay in the college review, is upon some social topic. The teacher, however, can find much to do, not only in guiding the social interest when it already exists, but in stimulating it in students as yet unkindled. It is needless to say no attempt is made to throttle student radicalism. A student can find two thousand anarchistic books and pamphlets in the library, and the advanced social position of many of the professors is a matter of public knowledge.

In all these matters the increasing emphasis upon personal attention to each student is, of course, a factor of ever-growing importance, and, if we regard the term in its broadest sense, it is not the least vital part of the teaching of the institution. There is no doubt that the advocates, from necessity or choice, of the smaller institutions of learning point to figures like those at Columbia and those of the other large universities as constituting in themselves a danger of neglect to the individual student, but, as a university president has pointed out, it is just as easy for ten teachers to neglect two hundred students as it is for fifty teachers to neglect eight hundred, and just as likely that they will. The question has nothing whatever to do with size; it has to do with the disposition and characteristics of the teacher.

Of the three functions of a university, research is the most elusive. Countless sins have been committed in its name, but there is no question as to its vital importance. The spirit of investigation is indeed the most valuable of all natural resources.

A graduate student worthy of the name is not content merely to wander about the fields that others have cultivated, but wishes to push out from the settlements to reclaim some portion of the forests of ignorance, and he is willing to make the long preparation necessary to fit himself for this high calling. Those who succeed are among the happiest men in the world, and a handful of such students makes a university worth while. There is, however, a reverse side to the picture as sad as the other is joyous—the men who with all the good will in the world simply haven't it in them, men for whom no amount of training will make up for a lack in that natural ability of a highly specialized type which is requisite for original research. There are too many students of this latter type in the universities to-day, and one of the tasks of the future will be to prevent as many as possible from entering upon a hopeless quest by devising some other test of admission than the possession of a bachelor's degree, which as we all know may mean much or little or almost nothing. Furthermore, those who do get in must be eliminated, kindly but firmly, before they have wasted too much of their own time and that of the professors and of their fellow-students. All along the line more personal attention to each student is needed to make sure that the investigations are real and not pseudo-research, and also to guard against the waste of precious funds. Another factor essential to the best progress for the future will be the finding of some other badge of alleged efficiency for teaching than the degree of doctor of philosophy.

Dean Woodbridge, in discussing this question in the Association of American Universities, pointed out that

> "the degree as conceived in our rules aims at one thing and has a certain emphasis, while our educational situation makes for a different thing and has a different emphasis. The degree in theory is more representative of certain traditional university ideas than it is of the society which supports our universities or of the students who seek instruction under our graduate faculties or of the educational status of the different departments of knowledge. It stands more for an ideal imposed upon our culture than for an ideal growing out of our culture. The degree lays emphasis on sound scholarship and advanced research; the situation in which we find ourselves lays emphasis on individual ability and proficiency. The degree aims at being the badge of the proved investigator; the situation makes it an indication of competency to perform certain services. In other words, the degree is conceived primarily with reference to a standard and not primarily with reference to the preparation, needs, and aims of the students who are prepared to spend several years in university study, nor with reference to the expansion of university courses and departments."

Every American university is encouraging students to undertake research in too many departments of knowledge. Mutual agreements, concentrating in single universities the fields necessarily narrow, would not only free funds now wasted and sorely needed for work in profitable fields, but would, by bringing the students together in larger units, do much to supply the intellectual rivalry now markedly absent.

The higher learning has not been without its share of snobbery and intolerance, and it is only recently that investigation in subjects of immediately recognized practical value has been regarded as worthy of the name of research, even with a small " r." Not so long ago Columbia University would have questioned the wisdom of accepting $75,000 for the study of legislative drafting, or of $50,000 for good roads. To-day research in education has been well organized, medicine is beginning to find itself, and law and engineering are feeling their way. The dean of the faculty of applied science is urging the trustees to erect a factory building to render the kind of service in commercial research that is already being given in Germany by many of the technical schools.

It is too soon to say what will be the influence on the universities of the separately endowed research institutions which are becoming a new and significant feature on our intellectual horizon. So far as one can see, however, they will benefit the universities rather than harm them, both by providing a spur to greater accomplishment and by furnishing a career to the men interested in research who cannot or will not teach, and who up to the present have had to pretend to do so in order to earn a living and get the opportunity for investigation.

The public usefulness of Columbia in teaching and research to-day may fairly be assumed from the numbers of its students. Its public service in other ways is harder to measure, but there may be seen clearly on every hand a tendency to broaden out beyond department and professional bounds toward identification with the city, state, and country. The president has expressed the general feeling that "our material equipment and advantages are not regarded as ends in themselves, but simply as so many means to that single higher end of service to which the university is devoted and for which it exists."

The institution has an honorable tradition as to the public usefulness of its men. When the New York Chamber of Commerce opened its present building three statues were unveiled, all of Columbia graduates—Clinton, Hamilton, and Jay. The second Johnson, Mitchill, and Renwick were prominent public servants, and later on Torrey, Lieber, Newberry, and Trowbridge all rendered service of signal value to the Government at Washington. Since 1849, Columbia's president has always been a public servant of distinction, as is also the present chairman of the trustees, George L. Rives.

An important part of the public service of an institution is in the academic and public utterances of its professors. Kent's Commentaries, it is said, have had a deeper and more lasting influence in the formation of the national character than any other secular book of the nineteenth century, and the influence of the later law teachers upon legal thought throughout the country, through their case books and the like, has been of the first importance. Few recent books have been so influential for the public good as Professor Holt's on the care and feeding of children. The President's Report for 1913 contains a striking list of thirty-three recently published books of permanent importance by members of the University. In addition to Dean Russell's campaign to induce college-bred women to go into kindergarten and primary education and into the various practical arts, he has joined with Professor Dewey in making a far-reaching educational recommendation. Realizing that for most children six years represents the entire period of formal training, they would lay during these years the soundest possible foundation. While retaining the traditional humanistic and scientific studies, they would substitute for the so-called " frills," which now occupy so much of the students' time, a single comprehensive and carefully co-ordinated study—the elements of industry.

The total amount and variety of outside service were never realized, even within the University, until the recent publication of a list, filling thirteen octavo pages, of the public and semi-public undertakings in which fully half the professors are now engaged. Some have been mentioned in a previous chapter, and it is impossible in this place to give a summary of Columbia's record in more than a single field. The kind of service likely to prove most rich to-day in possibilities for the betterment of mankind is perhaps in the field of internationalism. Until the publication of Moore's monumental "Digest of International Law," Lieber's Civil War " Instructions for the Government of Armies " was the most important contribution which America had made to the law of nations. It was still a living and controlling document at The Hague in 1907. President Low served as a delegate to the first Hague Conference. To-day not only are men in the service of Columbia executive officers of the New York Peace Society and the Association for International Conciliation, but of the three great divisions of the Carnegie Endowment for the Advancement of Peace, the most important contribution in the field of International Law has been assigned to Professor Moore, Professor Clark is at the head of the division of Economics, and President Butler of the division of Intercourse and Education.

For the University as such to claim entire credit for the public services of its members would of course be absurd, but it does deserve its share, in the first place for the conscious selection of men of this type, and further for giving them the opportunity to pursue their public work and accepting it as creditable academic service. This, by the way, is a comparatively recent development. It will be remembered even the progressive trustees of 1857 noted with evident approval that only three of the faculty "wrote books," presumably to the neglect of their stated duties.

The opportunities for professors to interest themselves in outside public activities have been greatly increased by the development of functional administration in our universities. It is doubtless true that in some cases students suffer from too great devotion on the part of their professors to outside interests, but, by and large, the student as well as the institution derives benefit. There is such a thing as academic provincialism, and it is a thing to fear.

A more definitely institutional contribution to public needs is the lending of men to meet some sudden public need. It has been found that university men can be rapidly mobilized for public service and, their tasks done, they return quietly to the ranks of teaching scholars. In times of fire and flood, Professor Devine was sent to San Francisco and to Dayton to administer relief funds. Professor Boas spent a year in Mexico to assist in the organization of a national university there. Professor Goodnow was loaned to the Economy Commission at Washington for a year and is now on a three-year mission in China as constitutional adviser to the Republic. On various occasions Washington has borrowed Professor Moore, who is at the moment in the service of the Department of State.

Aside from the services of individuals, the University as an institution endeavors to do its share in movements of public importance. Whenever possible the dormitories are thrown open without charge to delegations visiting the city. Other buildings are turned over to bodies temporarily without a home—the National Academy of Design after its recent fire, for example, and churches of various denominations.

The Speyer Building was definitely constructed as a social center. At the Medical School, not only has the total free attendance at the Vanderbilt Clinic in the last decade exceeded three million and the cases at the Sloane Hospital approached thirty thousand, but social workers and visiting nurses are employed, and an animal hospital, an open-air public school for tubercular children, and a milk station are maintained.

In one field of vital public importance, the providing of wider opportunities for women, Columbia has already done much, but it has still more to do. In undergraduate study and in preparation for certain professional and vocational work the situation is satisfactory, and Barnard College maintains a special officer to keep in touch with the movements now in progress to open up for college women various occupations other than teaching. But it is still true, as Professor Trent wrote some years ago, that " an intelligent and reputable human being, simply because the accident of birth has made her a woman, may be denied the advanced and specialized training in legitimate studies taught in Columbia University to mortals differently attired." The most flagrant cases are, of course, law and medicine, since up to the present there has been little demand on the part of women for training in engineering.

It would seem that, partly from deliberate policy and partly from the incessant stimulation of the surrounding city, Columbia is destined to continue directly or indirectly to make her contributions to general public service. Though the service will never be given for this reason, it is probably true that her financial resources for the future will largely depend upon her doing so, for gifts are likely to depend more and more as time goes on upon the general public usefulness of the recipient.

Besides the complex problems of space and numbers, of identification with the community and willingness to serve it, all of which condition the future of a university, there still remains one to be considered, and that is the question of outlook. The living university must be not only a storehouse of the old thoughts, but a workshop of the new. Mr. Stokes has recently pointed out in the *Yale Review* that our most venerable universities (he mentions particularly Harvard, Yale, Princeton, Pennsylvania, and Columbia) were centers of ardent patriotism and of progress in the Revolution and during the Civil War. "They must continue to be actively on the side of progress in solving the many social, political, and industrial problems of to-day, or else forfeit their claim to represent the American people. Their contact with enthusiastic youth from all sections, combined with their firm sense of dependence upon the past, should make them well-balanced leaders in meeting the country's needs. Universities may be liberal, as in Russia, or conservative, as in England, and yet continue forces for good. But the moment they become reactionary they will forfeit that respect of the people which is necessary for any successful institution in a democracy."

No man can foresee the lines along which progress is to be made. The radical in youth is often the conservative, even the reactionary, in after years, although youth is not always in the front rank and age in the rear. In any large body of men there will always be those looking backward and those looking forward. Today Columbia, to quote an interesting recent newspaper article by an undergraduate, " through a large percentage of her teachers and through many of her students, represents the type of university dedicated to progress and theories of betterment which have been almost entirely in the past the possession of European universities. Its future usefulness depends upon the permanence of this condition more than upon any single factor."

The past of Columbia University has had its vital share in what is best in the history and life of our nation, and particularly of our city, and the present is a period of splendid interest and activity. In the words of President Butler: " So soon as one need appears to be met, twenty others spring up to take its place. . . . The glory of our task is that it cannot be finished. It is because it is alive, because it grows, because it is human, because it touches individual and public life in ten thousand points, that we never shall be done, and we never want to be done."

I have tried in this concluding chapter to give some of the factors affecting its future, but after all this future cannot be regarded as a separate thing, it is bound up in the future of the university as an institution, and there is within my knowledge no more eloquent or inspiring outlook upon that future than in the words of the president of Columbia University at the dedication of the New York State Education Building in 1912:

"We must not shut our eyes to the fact that the task of the university grows greater as the difficulties of democracy grow heavier and more numerous. But the university dare not shrink from its responsibility, from its call to public service, from its protection of liberty. The university must not follow, it must lead. The university must not seek for popularity, it must remain true to principle. The university must not sacrifice its independence either through fear of criticism or abuse or through hope of favors and of gain. We dare not be false to our great tradition. Remember that, of all existing institutions of civilization which have had their origin in the western world, the university is now the oldest, save only the Christian Church and the Roman Law. The university has witnessed the decline and fall of empires, the migration of peoples, the discovery of continents, and one revolution after another in the intellectual, social, and political life of man. . . .

"The university has been at the heart and center of almost every great movement in the western world that has an intellectual aspect or an intellectual origin. Its responsibility was never so heavy as it is to-day. . . .

"We are looking out, by common consent, upon a new and changing intellectual and social sea. The sight is unfamiliar to the individual, but not to the university. The university has seen it so often, whether the change has been for good or for ill, that the university knows that, if only it keeps its mind clear and its heart true and the prow of its ship turned toward the pole-star, it will survive these changes, whatever they may be, and will contribute to make them beneficent. The university knows by long experience that it will come out of all these changes stronger, more influential, and bearing a heavier responsibility than ever.

"I do not speak of the university which is brick and stone and mortar and steel. I do not even speak of the university which is books and laboratories and classrooms and thronging companies of students. I speak of the university as a great human ideal. I speak of it as the free pursuit of truth by scholars in association, partly for the joy of discovery in the pursuit of knowledge, partly for the service to one's fellow-men through the results of discovery and the pursuit of knowledge.

"When I look back and remember what the university so conceived has done, when I remember the great names, the noble characters, the splendid achievements that are built forever into its thousand and more years of history, I think I can see that we have only to remain true to our high tradition, only to hold fast to our inflexible purpose, only to continue to nourish a disciplined and reverent liberty, to make it certain that the university will remain to serve mankind when even the marble and steel of this great building shall have crumbled and rusted into dust."

APPENDIX

A

COLUMBIA UNIVERSITY, COMPARATIVE FIGURES FOR THE YEARS OF THE ADOPTION OF THE UNIVERSITY REPORT, OF THE ELECTION AND RETIREMENT OF PRESIDENT LOW, AND FOR 1913

	1857	1890	1901	1913
Teachers	14	203	393	738
Resident students	179	1,753	4,440	9,929
Students receiving degrees and diplomas	27	332	610	1,660
Books in library, about..	20,000	100,000	315,000	520,000
Income	$62,000	$519,000	$1,400,000	$3,048,092
Assets (net) ...	$1,054,000	$11,365,000	$21,000,000	$54,000,000

B

SUMMARY OF FINANCIAL STATEMENTS, 1912-13

Income:	Columbia Univ.	Barnard Col.	Teachers Col.	Phar'cy
Interest	$402,029.21	$71,449.25	$95,751.58	$513.02
Rents	700,372.72	———	———	———
Student fees	764,136.04	100,472.81	495,377.49	47,308.50
Other student receipts (room-rent, etc.)	154,697.82			5,385.70
Gifts	154,213.43	1,130.95	22,254.65	
Miscellaneous ...	17,088.43	14,408.26	1,039.63	453.38
Total	$2,192,537.65	$187,461.27	$614,423.35	$53,660.60
Expenditures:				
General administrative expenses	$151,775.00	$139,930.60	$509,087.50	$34,440.76
Salaries and departmental expenses	1,355,088.00			
Library	106,461.50	2,385.12	11,946.64	493.00
Care of buildings and grounds ..	321,538.00	54,930.90	86,955.18	2,403.70
Business administration	50,200.00	4,353.45	15,035.72	190.37
Miscellaneous expenses	59,299.27	13,967.50	9,287.95	130.50
Interest	115,945.00	2,716.97	———	4,050.00
Reduction of debt	100,000.00	———	———	5,000.00
Total	$2,260,306.77	$218,284.54	$632,312.99	$46,708.33
Surplus or deficit	−$67,769.12	−$30,823.27	−$17,889.64	+$6,952.27

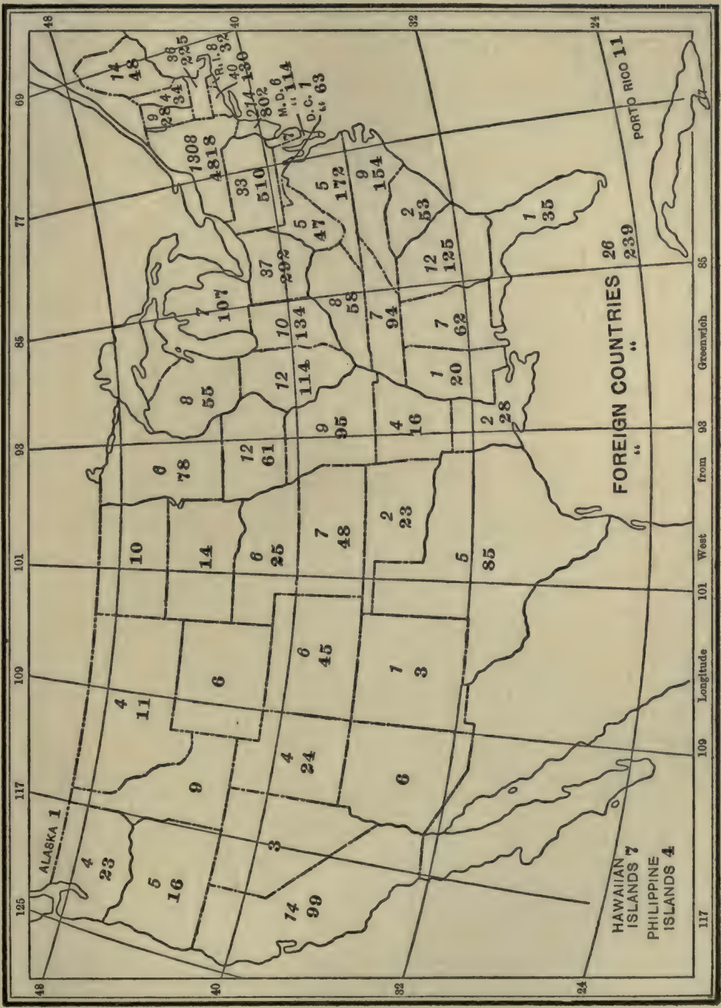
C

REGISTRATION IN ALL FACULTIES, NOVEMBER, 1904–13

NOTE: The current figures given in the body of the book are for February, 1914.

Students registered in:	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Columbia College	527	557	606	609	645	632	729	757	819	841
Barnard College	363	371	398	420	467	513	521	607	590	623
Total undergraduates	890	928	1004	1029	1112	1145	1250	1364	1409	1464
Faculty of Political Science	148	174	177	210	239	251	316	348	366	—
Faculty of Philosophy	392	490	492	532	556	573	658	705	777	—
Faculty of Pure Science	160	140	139	155	158	167	193	217	256	—
Total non-professional graduate students	700	804	808	897	953	991	1167	1270	1399	1496
Schools of Mines, Engineering, and Chemistry	589	566	524	585	677	666	713	652	634	665
Fine Arts	109	139	112	147	156	153	176	149	154	159
Law School	342	277	261	247	318	318	365	410	457	450
Medical School	560	424	352	298	306	307	316	346	336	341
School of Journalism	—	—	—	—	—	—	—	—	72	106
College of Pharmacy	435	353	254	229	284	290	283	288	420	441
Teachers College (Faculty of Education)	640	792	726	891	950	974	1406	1476	1379	1345
School of Practical Arts	—	—	—	—	—	—	—	—	227	325
Total professional students	2675	2551	2229	2356	2691	2708	3259	3321	3679	3832
Double registration	218	266	155	182	216	194	230	286	334	389
Net total resident students	4056	4017	3886	4100	4540	4650	5446	5669	6148	6403
Summer Session	961	1018	1041	1392	1532	1968	2632	2973	3602	4539
Double registration	184	280	277	336	395	486	667	704	748	1013
Grand total regular students	4833	4755	4650	5156	5677	6132	7411	7938	9002	9929
Students in extension courses and in special classes at Teachers College	684	964	1017	3055	2879	2250	1820	2404	2939	3644

D



GEOGRAPHICAL DISTRIBUTION OF STUDENTS, 1896 AND 1913
(The figures in italics are for 1896.)

E

The Buildings of Columbia University, 1914

Building	Ground Plan		Height in feet	Floor Area in (square) feet	Volume in (cubic) feet	Floors	Rooms	Sittings	Cost
	Length in feet	Breadth in feet							
Library	194½	194½	151	119,000	3,530,000	5	68	1,066	$1,106,540.00
Fayerweather	150	57	100	44,000	830,000	6	59	578	274,113.00
East Vault	211	32	26	7,000	174,000	1	1	0	30,382.00
Schermerhorn	205	80	100	75,000	1,646,000	6	60	666	457,658.00
University	259	176	70½	74,000	2,438,000	4	49	188	951,524.00
Havemeyer	205	80	100	75,000	1,646,000	6	71	746	516,488.00
Engineering	150	57	100	43,000	832,000	6	50	448	284,075.00
West Vault	211	32	26	7,000	174,000	1	1	0	37,316.00
Earl Hall	99½	58	102	12,000	286,000	3	19	400	164,844.00
Mines	145	57	100	42,000	824,000	6	50	381	305,506.00
East Hall	70½	69½	42	10,000	159,000	3	24	17	*30,000.00
Faculty Club	52	49	42	9,000	87,000	4	25	0	*25,000.00
Chapel	140	82	112	14,000	649,000	3	4	1,000	264,476.00
Observatories:									
Wilde	15½	15½	23	265	4,100	2	2	0	2,000.00
Transit House	20	13½	10	210	2,700	1	2	0	*1,316.00
Hamilton Hall	205	53	100	61,000	1,006,000	7	94	2,451	463,556.00
Hartley Hall	137	61	102	66,000	733,000	11	318	0	335,173.10
Livingston Hall	137	61	102	66,000	733,000	11	318	0	332,396.00
Kent Hall	205	53	100	53,000	1,006,000	6	43	721	530,030.49
Philosophy	145	57	100	45,000	824,000	7	67	312	348,790.82
Avery	150	57	91	39,000	755,000	5	30	172	342,501.32
Greenhouse	90	24	14	1,720	26,000	1	5	0	7,348.62
President's House	84	36	67	14,000	223,000	5	41	0	207,857.58
Journalism	205	53	100	66,000	1,015,000	7	60	703	560,000.00
Furnald	137	61	102	67,000	743,000	11	316	0	375,000.00
Laboratory	100	35	55	12,000	192,500	4	34	0	55,000.00
Barnard College:									
Milbank	119	65	84	43,700	650,000	5	37	342	200,000.00
Fiske	166	53½	78	31,700	510,000	5	54	580	175,000.00
Brinckerhoff	166	55½	78	31,700	510,000	5	41	281	150,000.00
Brooks	122	42	100	40,100	446,700	9	158	0	267,402.38

Teachers College:									
Main Building	169	132	88	67,000	1,312,400	5	71	423	542,390.09
Milbank Memorial	146	52	88	30,800	721,200	5	41	683	256,870.89
Macy Building	145	74	88	39,400	763,400	5	45	325	252,233.03
Thompson Building	110	84	91½	48,900	918,700	6	62	288	397,684.62
Horace Mann	202	100½	79	99,100	1,413,600	6	78	2,481	443,092.71
Whittier Hall	202	100	130	132,989	2,000,000	9	650	0	1,100,000.00
Household Arts	153	57½	106½	39,027	944.766	5	86	805	500,000.00
Speyer	70	49½	83	19,700	283,100	6	49	190	117,675.16
Pharmacy	100½	75	95	40,700	576,000	7	43	315	143,000.00
Medical School:									
South Wing	141	43½	87½	35,000	632,000	5	35	206	
Middle Wing	56	54½	76½	19,000	320,000	4	17	1,340	*450,000.00
North Wing	94	43½	106½	27,000	486,000	6	50	380	
Anatomy	88½	45	87½	21,000	383,000	5	11	150	*125,000.00
Vanderbilt Clinic:									
East	106	60½	107	37,000	673,000	6	35	154	*225,000.00
West	99½	60	73	29,000	409,000	5	46	524	*100,000.00
Sloane Hospital for Women	145	98	87	66,000	956,000	8	116	50	496,440.18
Gynecological Building	77	42	125	25,872	405,000	8	64	64	399,263.14
Boat House	101	50	35½	11,400	125,900	2	13	0	*30,000.00

* Estimated.

SUMMARY

Totals	Floor Area in (square) feet	Volume in (cubic) feet	Rooms	Sittings	Cost
Morningside Site, University Corporation	1,022,195	20,538,300	1,821	9,849	$8,008,891.93
Barnard College	147,200	2,116,700	290	1,203	792,402.38
Teachers College	457,216	8,074,066	1,033	4,200	3,492,272.34
Speyer School	19,700	283,100	49	190	117,675.16
College of Pharmacy	40,700	576,000	43	315	143,000.00
Medical School	259,872	4,264,000	374	2,824	1,795,703.32
Boathouse	11,400	125,900	13	0	30,000.00
	1,958,283	35,978,066	3,623	18,581	$14,379,945.13

F

GIFTS, BEQUESTS OF $50,000 AND ABOVE, AND CLASS MEMORIALS

(To the University Corporation unless otherwise indicated)

1881—Stephen Whitney Phœnix, '59.
On account of residuary estate. . (about) $210,000.00
1886—William H. Vanderbilt (To College of Physicians and Surgeons before merger).
The Medical School............land and $400,000.00
1886, 1889, 1895, 1910—Mr. and Mrs. William D. Sloane.
For construction and endowment of Sloane Hospital for Women ....(about) $1,200,000.00
1886, 1896—Cornelius, William K., Frederick W., and George W. Vanderbilt.
For erection and endowment of Vanderbilt Clinic in memory of William H. Vanderbilt.....$350,000.00
For Institute of Anatomy.................$125,000
1889—Estate of President and Mrs. F. A. P. Barnard.
For benefit of library and to establish a fellowship and a medal..................(about) $86,000.00
1890-1910—Mr. and Mrs. Samuel P. Avery.
For purchase of books on architecture and allied arts in memory of Henry Ogden Avery.$150,000.00
1891—Estate of Charles Bathgate Beck, '77. . (about) $312,000.00
1891—Estate of Daniel B. Fayerweather.
Legacy used for erection of Fayerweather Hall, (about) $308,000.00
1891—Estate of Charles M. Da Costa, '55.
For benefit of the Department of Zoology.$100,000.00
1892—William E. Dodge (Teachers College).
For Main Building $80,000.00
1892—George W. Vanderbilt (Teachers College).
For land $150,000.00
1892, 1912—Joseph Pulitzer.
For establishment of Pulitzer Scholarship Fund, $350,000.00
1893—Estate of Hamilton Fish, '27.
Applied toward purchase of new site.....$50,000.00
1894—Mrs. Caroline L. Macy (Teachers College).
Building in memory of her husband, Josiah Macy, Jr. $252,233.03
1893—J. Pierpont Morgan.
Toward purchase of new site...........$100,000.00
1893—William C. Schermerhorn, '40.
Toward purchase of new site............$100,000.00
1893—D. Willis James.
Toward purchase of new site............$50,000.00

1893—Cornelius Vanderbilt.
Toward purchase of new site...........$100,000.00

1896—Seth Low, '70.
For erection of Library Building as a memorial to his father, Abiel Abbot Low (about) $1,100.000.00

1896-1903—Mrs. A. A. Anderson (Barnard College).
For Milbank Hall and Milbank Quadrangle, (about) $1,200,000.00

1896—Children and Nephew of the late Frederick Christian Havemeyer.
For erection of building for Department of Chemistry known as Havemeyer Hall.......$450,000.00

1896—Mrs. Mary E. Ludlow.
For endowment of the Department of Music, in memory of her son, Robert Center....$178,000.00

1896—William C. Schermerhorn, '40.
For erection of building for natural sciences, known as Schermerhorn Hall.........$450,000.00

1896—Mrs. Van Wyck Brinckerhoff (Barnard College).
For Brinckerhoff Hall $150,000.00

1896—Mrs. Joseph M. Fiske (Barnard College).
For Fiske Hall, a memorial to her husband, $150,000.00

1898—Chamber of Commerce of the State of New York (through public subscription).
For establishment of George E. Waring Fund for instruction in municipal affairs (subject to life interests of Mrs. and Miss Waring)...$100,000.00

1897—Joseph Milbank (Teachers College).
Milbank Building $256,870.89

1898, 1900, 1911—Gen. H. W. Carpentier, '48 (Barnard College).
To establish Henrietta Carpentier Fund for general endowment (subject to life interests)..$250,000.00

1899—Anonymous.
For endowment of Jacobi Ward for children in Roosevelt Hospital $50,000.00

1899—John D. Rockefeller.
For endowment of Professorship of Psychology, $100,000.00

1899—John D. Rockefeller (Teachers College).
For land $50,000.00

1899, 1900—Mrs. Caroline L. Macy (Teachers College).
For endowment $175,000.00

1900—William E. Dodge.
For erection of building for Young Men's Christian Association known as Earl Hall, in memory of his son ....(about) $160,000.00

1900—Mrs. E. T. Bryson (Teachers College).
For endowment $83,827.85

1900—Alumni Gifts.
Toward erection of Alumni Memorial Hall, $100,000.00

1901—Anonymous.
For endowment of Department of Chinese (Dean Lung Professorship) $225,000.00

1901—Estate of Henry Villard.
To be applied to the general uses of the University, $50,000.00

1901—John D. Rockefeller (Barnard College).
Toward Endowment Fund..............$250,000.00

1901—Mr. and Mrs. James Speyer (Teachers College).
Speyer School $133,024.47

1901—Mr. and Mrs. Valentine Everit Macy (Teachers College).
Horace Mann School Building, in memory of Caroline L. Macy................(about) $450,000.00

1903—Gen. H. W. Carpentier, '48.
For establishment of James S. Carpentier Fund for the benefit of the Law School.........$300,000.00

1903—Mrs. Henry Hartley Jenkins and Marcellus Hartley Dodge, '03.
For erection of dormitory known as Hartley Hall, in memory of Marcellus Hartley......$350,000.00

1903—Estate of Dorman B. Eaton.
For endowment of Chair of Municipal Science and Administration $100,000.00

1903—Joseph F. Loubat.
For endowment of Loubat Professorship of American Archæology $100,000.00

1903, 1911, 1912—Estate of Joseph Pulitzer.
For the establishment of the School of Journalism, $1,000,000.00

1904—Edward D. Adams.
For establishment of a Fellowship in Physical Science, in memory of Ernest Kempton Adams, E. E., '97 ....$50,000.00

1904—Gen. H. W. Carpentier, '48.
Toward establishment of a professorship in the Medical School, in memory of his brother, Reuben S. Carpentier $100,000.00

1904—Adolph Lewisohn.
For erection of School of Mines Building, (about) $300,000.00

1904—Misses Olivia Phelps Stokes and Caroline Phelps Stokes.
For erection of St. Paul's Chapel (about) $250,000.00

1904—Mrs. William E. Dodge (Teachers College).
For land $50,000.00

1904—Estate of William E. Dodge (Teachers College).
For land $50,000.00

1904—James Speyer (Teachers College).
For land $50,000.00

1905—Mrs. Frederick Ferris Thompson (Teachers College).	Physical Education Building, in memory of her husband	$400,000.00
1905—John Stewart Kennedy.	For erection of Hamilton Hall	$500,000.00
1905, 1906, 1907—John D. Rockefeller (Teachers College).	For endowment	$500,000.00
1905—Jacob H. Schiff.	For endowment of Professorship of Social Economy,	$100,000.00
1905—James Speyer.	For establishment of Theodore Roosevelt Professorship in the University of Berlin	$50,000.00
1906, 1909—Mr. and Mrs. George Blumenthal.	For scholarships in the School of Medicine and for establishment of a Chair in Politics	$114,575.00
1906—Mrs. Maria H. Williamson.	For establishment of professorhip or lectureship on the origins and growth of civilizations among men (Edward R. Carpentier Fund)	$250,000.00
1906—Anonymous Donors (Barnard College).	For construction of Brooks Hall, named in memory of Rev. Arthur Brooks	(about) $250,000.00
1906—Anonymous (Teachers College).	For endowment	$50,000.00
1906—Mrs. William E. Dodge (Teachers College).	For endowment	$50,000.00
1907—Anonymous.	For establishment of Henry Bergh Fund, to be used for the inculcating of a spirit of kindness and consideration toward the lower animals,	$100,000.00
1907—Miss Grace H. Dodge (Teachers College).	Whittier Hall stock	$125,000.00
1907—Mr. Charles W. Harkness (Teachers College).	Whittier Hall stock	$50,000.00
1907, 1908, 1909, 1910—Miss Grace H. Dodge (Teachers College).	Household Arts Building	(about) $450,000.00
1908—Children of the late Rev. Orlando Harriman, '35.	For endowment of Professorship of Rhetoric and English	$100,000.00
1908—Anonymous.	For cancer research	$50,000.00
1908—Estate of D. Willis James.	Applied toward salary of Professor of Geology,	$100,000.00
1908—Estate of Lura Currier.	Bequest to establish Nathaniel Currier Fund for the Library	$50,000.00

1908—Estate of Emily O. Gibbes (Barnard College).
For endowment fund (subject in part to life interests) (about) $378,000.00

1909—Anonymous.
Toward erection of Kent Hall $100,000.00

1909—Estate of John Stewart Kennedy.
On account of legacy set aside as an Endowment Fund (about) $2,177,000.00

1909, 1910—Mrs. Helen Hartley Jenkins.
For endowment of Teachers College $150,000.00
For erection of Philosophy Building $350,000.00

1910—Estate of John S. Kennedy (Teachers College).
For land $50,000.00

1910—Anonymous.
For establishment of John W. Burgess Fund, to be applied toward the general endowment of the University $100,000.00

1910—George J. Gould.
Toward purchase of East Field $100,000.00

1910—Frank A. Munsey.
Toward purchase of East Field $50,000.00

1910—William K. Vanderbilt.
Toward purchase of East Field $136,250.00

1910—Estate of John Stewart Kennedy (Barnard College).
Legacy (about) $50,000.00

1911—Many Contributors.
Fund in honor of Richard Watson Gilder, for study of political and social conditions (about) $50,000.00

1911—Samuel P. Avery.
For erection of Avery Architectural Library Building, in memory of his parents and his brother, $330,000.00

1911—Estate of George Crocker.
To establish fund for cancer research, (about) $1,440,000.00

1912—Mrs. Frederick P. Furnald.
For erection of dormitory known as Furnald Hall, in memory of her son, Royal Blackler Furnald, of the Class of 1901 $300,000.00

1912—Mr. and Mrs. William R. Peters.
For establishment of a fund for engineering research, in memory of William Richmond Peters, Jr., of the Class of 1911 $50,000.00

1913—Anonymous.
For establishment, later, of Fine Arts Endowment Fund $250,000.00

1913—Estate of Mrs. Annie P. Burgess.
For general endowment and for establishment of scholarships (about) $67,000.00

1913—Mrs. W. Bayard Cutting and Children.
For establishment of Cutting Travelling Fellowships, in memory of W. Bayard Cutting, '68, $200,000.00

Class Memorials Presented on Graduation or at Anniversaries

- '74, College:
  - Ornamental clock in Reading Room of Library.
- '77, College:
  - Portrait of Alexander Hamilton.
- '80, College and Mines:
  - Wrought iron doors, Hamilton Hall.
- '81, College, Mines, and Political Science:
  - Flagpole with granite and bronze base.
- '81, College and Mines:
  - "The Gemot," Hamilton Hall.
- '82, College:
  - Wrought-iron gate;
  - Stained glass window, College Study.
- '82, Mines:
  - Bronze torchères in front of School of Mines.
- '83, College, Mines, and Political Science:
  - Bronze torchères in front of Chapel.
- '84, College:
  - Marble doorway and clock, Hamilton Hall.
- '84, Mines:
  - Improvement of South Field for athletic purposes.
- '85, Mines:
  - Fellowship Fund of $8,200.
- '85, College:
  - Stained glass window, "Sophocles," Hartley Hall;
  - Granite Sun Dial.
- '86, College:
  - "American Literature Library."
- '86, Arts, Mines, and Political Science:
  - Marble Exedra.
- '87, College:
  - Venetian Well-Head.
- '87, Mines:
  - Student Loan Fund of $7,200.
- '88, College and Mines:
  - Wrought-iron gates.
- '90-92, College and Mines:
  - Mapes Memorial Gate.
- '91, College:
  - Stained glass window, "Vergil."
- '99, College and Mines:
  - Improvement of South Field for athletic purposes.
- '00, College and Applied Science:
  - Power Launch "1900."
- '01, College and Applied Science:
  - For endowment of Committee on Employment for Students.
- '02, College:
  - Picture, "The Round Table of King Arthur."

'05, Law:
  Portrait of Chancellor Kent.
'10, *et seq.*, College:
  Collection of engravings, Hamilton Hall, "Dean Van Amringe Fund."
'12, Law:
  Clock in Kent Hall.
'13, Law:
  Moot Court furniture.

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